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SUCCESSFULLY MANAGING INSURGENCIES AND TERRORISM EFFECTIVELY (SMITE)

AIR FORCE RESEARCH LABORATORY

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14. ABSTRACT
SMITE sought to develop a wargame to assist the examination of the applicability of new technology and TTPs and secondarily provide a modifiable tool useful for training, educating and assisting American and allied planners committed to COIN/CT & AT/FP efforts (hereafter referred to simply as "COIN"). SMITE assessed various hypotheses on how to measure progress in COIN operations; incorporating the most influential measures into planning support tools in new ways based on new ideas and technologies. Furthermore, SMITE analyzed state of the art methodologies for measuring, monitoring, and assessing COIN operations, tested them against both historical and potential COIN scenarios, and created a pen-and-paper wargame training tool as a result (see Appendix D – SMITE Rules Set 1.0 for more). Due to the broad scope and time lengths covered in the wargame, the resulting granularity is very broad.

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1.0 SUMMARY

"Successfully Managing Insurgencies and Terrorism Effectively (SMITE)" -- previously known as "Insurgency and Terrorism Investigation and Measurement (INTERIM)" -- has spent the past 36 months from October 2007 through September 2010 examining and analyzing literature on insurgency and terrorism, modeling and simulation, as well as other topics more broadly applicable such as wargaming, strategy and tactics, identifying factions and divisions within populations and organizations, the impact of unexpected events, and how to effectively represent all of the aforementioned within a functioning educational tool.

SMITE's findings and resultant theories are presented here.

SMITE seeks to develop a war game to assist the examination of the applicability of new technology and TTPs and secondarily provide a modifiable tool useful for training, educating and assisting American and allied planners committed to COIN/CT & AT/FP efforts (hereafter referred to simply as "COIN").

SMITE assessed various hypotheses on how to measure progress in COIN operations; incorporating the most influential measures into planning support tools in new ways based on new ideas and technologies. Furthermore, SMITE analyzed state of the art methodologies for measuring, monitoring, and assessing COIN operations, tested them against both historical and potential COIN scenarios, and created a pen-and-paper wargame training tool as a result (see **Appendix D – SMITE Rules Set 1.0** for more).

2.0 INTRODUCTION

SMITE focused its efforts primarily on the operational level of warfighting, maximizing the results of directing the program's energies toward prevention (as related to stabilization efforts), deterrence, detection, and the defense against/defeat of insurgent and terrorist campaigns; all with an eye towards ensuring that the current operational environment was made or remained amicable to post-conflict recovery efforts to be undertaken by other groups or agencies.

By concentrating the project's focus at the operational level a nice synergy was effected with the intended target audience within the Air Force; while the USAF certainly practices and utilizes tactics and is undeniably the premier national tool of strategic power projection, it is deployed and employed primarily at the operational level. The operational level of planning and execution offers an excellent mix of the strategic and tactical without being too encumbered by the pitfalls of either.

3.0 OVERVIEW

Current wargames and simulations rely heavily on "hard" quantitative numbers while the resolution of insurgencies, terrorist campaigns, and similar activities depend on "soft" qualitative values such as cultural awareness of (and sensitivity to) indigenous societal values, and the perceived legitimacy of COIN actors and actions, among others.

3.1 The Relevance of the Problem

The majority of the Department of Defense's COIN work is done by the U.S. Army and the United States Marine Corps. They provide the bulk of the ground troops and the vast majority of American presence when the U.S. conducts such operations. The USAF, while able to play an important role, often does not see itself as integral to the day to day nuts and bolts work of such campaigns, either by their preference or by exclusion at the hands of the other services.

While perhaps not immediately apparent, the relevance of COIN operations to the traditional USAF is direct and real; a closer look at today's Air Force reveals airmen in harm's way fighting and dying on the ground (Figure 1), with assets operating in environments where the front-line is everywhere, with no rear area in which to shelter. The Air Force has been slow in adjusting to this new reality, with national-level authorities such as the Secretary of Defense decrying an institutional "business as usual" attitude leading the perception of the USAF's poor contribution to current Overseas Contingency Operations (formerly referred to as the "Global War on Terrorism"). When airmen are driving trucks for the Army instead of operating as airmen, it indicates to all that the USAF is not fully contributing its asymmetrical capabilities to conflict.

SMITE is intended to provide the Air Force with the opportunity to experiment with new ideas and fully exploring the capabilities it can usefully bring to the table.

3.2 The Nature of the Problem

Today's asymmetric warfare environment demands a new generation of smart, nuanced, user-friendly combat simulations that go beyond the historical premise of massive "force-on-force" operations. Although much work has been executed, there is still much to be done in order to support COIN activities.

Most traditional wargames deal primarily with easily identifiable threats such as tanks, infantry, and aircraft, represented by easily quantifiable values such as attack and defend strengths. In such a way, the modern symmetric conflict is easily and often well represented.

Representing asymmetric conflict can likewise be similarly broken down and modeled today *but only at the point of attack*; for instance when a terrorist detonates a suicide bomb or an insurgent's mortar round impacts outside of a police recruiting station, the strength of the explosion can be quantified and matched against the structural integrity of the recruiting station and surrounding buildings, the sentry wearing body armor standing guard and the unarmored recruits waiting in line. What is usually not clearly understood are the operational and strategic impacts of such attacks.

Limiting oneself to such representation is reactionary and futile. This is somewhat analogous to learning how to box by being taught how to take a punch – and nothing else.

So while surviving such attacks may or may not be touched upon, what is not been widely addressed   at the operational level is how such attacks could be prevented, deterred, detected, defeated or recovered from, much less how to model such processes.

Why is this?

There are many things that wargames already do well; most anything "hard science" related -- such as ballistics, armor density, sensor capabilities, and so on -- are already well understood and measured in modern simulations.

Likewise, many of the "social science" aspects of military life (such as morale, combat experience, etc.) are ably represented in several good examples of today's wargames.

While things that are already done well can always be improved upon, this project concentrated on the factors that have not been well explored in military simulations.

Although some of the contributing factors as to how insurgencies and terrorism can be avoided or survived from have been identified, few have been successfully quantified and subsequently matched for modeling purposes at the operational level.

3.3 The Nature of the Solution

For a solution, SMITE starts with a well known theory, the Political/Military/Economic/ Social/Infrastructure/Information (PMESII) system-of-systems model, and introduces two concepts that were refined during SMITE's development: Prevention, Deterrence, Detection, Defense/Defeat, and Recovery (PD3R) and a mapping of the spectrum from chaos to governance explored at the operational level. These theories and concepts are explored below.

SMITE puts forth the concept that the scope of COIN can be broadly divided into the five general phases of PD3R. These phases are not strictly linear and there is much overlap between them. If the operating environment is not geared towards preventing terrorism or insurgency, it is best to be able to deter it, and if it is not to be deterred, then it is best if one is able to detect it before it strikes. Whether or not a nascent insurgent movement or terrorist campaign is detected before it first strikes, one must be able to defend against those strikes when they come, and defeat those movements and campaigns as they arise. After the fact, the operating environment must be allowed to recover.

Whether a single tactical attack or an entire strategic campaign is being considered, much of Prevention is simply Recovery procedures minded by civil institutions before a terrorist campaign or insurgency has flared-up; whereas much of what's to be done for the sake of Recovery is the military simply conducting Preventative measures after insurgents or terrorists have done their damage. Service members, well-trained in the more immediate aspects of Prevention, will be well-equipped to handle the initial stages of Recovery, ideally before handing the job over to international and domestic civil institutions and actors.

4.0 GAME APPLICATION

What is the practical application of so much "soft data?" What has been learned that is really important to include? What needs to be modeled to ensure a comprehensive, if not innovative, training aid?

While potential answers to these questions are explored here, the reader is encouraged to examine the appendix, SMITE Game Theory, for a more concrete demonstration of practical application.

4.1 What to Model?

Any action by any group (or "faction") in the COIN realm has three components: means, motive, and opportunity. "Means" is fairly well understood and modeled. "Opportunity" is also well understood, but can be more subjective based on the actor's actual objective. Why this goal, or "Motive," is traditionally the least understood and least well represented in wargames. SMITE seeks to change that.

Often what motivates an individual or group will influence who they choose to associate with, as those with common interests naturally tend to gravitate towards one another. During times of peace and prosperity these natural social groupings tend to be benign and largely inconsequential where the smooth operation of a modern society is concerned. However, once a society or state is placed under the pressure of ongoing insurgency or terrorism campaigns, these societal "fault lines" can give rise to factions and factionalism; especially among our adversaries and the people. We would be wise to look for the fault lines between and within groups, so as to be able to avoid or exploit them as best suits us.

The general population groupings (adversaries, allies, the people, and U.S. forces) in which SMITE places the various actors in the COIN realm do not represent monoliths from which no one can diverge, but rather general categories from which factions can be modeled.

Depending on a group or faction's interests they may be concerned with one, some, or all of the "yardsticks" which measure the road between a chaotic situation such as an insurgency or terrorist campaign and a stable government; as a faction's interests are more clearly defined the U.S. and its allies gains a better idea of the most constructive way(s) to address that faction in furtherance of U.S. efforts towards the desired end-state.

Simply giving U.S. and allied forces a grasp on the motivating factors of the various players in a given COIN operation and keeping an eye on the ways in which the members of those factions are united or divided is not enough; there is still the unexpected to have to deal with, incorporated in SMITE by including random events.

Random events in SMITE are kept fairly generic and most are fairly typical of the petty aggravations and small victories experienced in day-to-day COIN operations and are drawn from the full PMESII spectrum as well as touching on things such as weather and terrain effects also.

Truly significant random events which are seen to have a low probability of occurring but would have a high impact if they did -- such as the 2004 Abu Ghraib photo scandal, Spain's 2004 elections altering their troop commitment in the wake of the Madrid train bombings, or the 2006 bombing the Golden Mosque of Samarra – are also abstracted and can still be mitigated by focusing on preparing for their potential effects, as opposed to trying to predict when/if said event will happen.

Even after SMITE has endeavored to identify for its audience what drives COIN's relevant actors, make them aware of those groups' internal dynamics, and prepare players for how to deal with the unexpected, there has to be an idea of what winning (i.e. "Victory Conditions") actually looks like.

For the scope of SMITE's purview (i.e. military actions), "winning" is more nuanced than just the official declaration of the end of major combat operations and the beginning of stabilization efforts; once concerted efforts to destroy or subvert the state by armed force have been eliminated and the indigenous forces of the host nation are willing and able to maintain order, the traditional military mission is done.

This is true even in the face of continued violence, as long as it is *criminal* violence to be handled by the police. Consider "insurgency-like" activities which take place in the U.S. even today which are dealt with at the law-enforcement level (albeit sometimes with serious firepower) such as street gangs, organized crime groups, poachers, militias, and so on.

4.2 How to Model It?

The SMITE simulation training tool focuses its efforts primarily on the operational level of warfighting which offers an excellent mix of both the strategic and tactical without being too encumbered by the pitfalls of either. The simulation takes the long view of conflicts to discourage short-term, short-sighted decision making, and stresses the importance of non-kinetic options. This prompts the warfighter to take fuller advantage of all the assets at their disposal.

A multiplayer format, supporting competing and cooperating factions, was necessary to properly reflect and represent the chaotic "shades of gray" nature of most modern COIN situations which would not play-out reasonably as simple two-sided black-and-white affairs.

SMITE's first edition pen-and-paper (PnP) format and utilization of cards and dice as playing pieces was born out of a desire to encourage physical proximity of players and direct engagement with one another over the course of the game, greatly facilitating the exchange of ideas and expediting the learning process, while still allowing for easy randomization, keeping game mechanics visible and readily modifiable, and providing a degree of self documentation.

Readers are again encouraged to explore the appendix, SMITE Game Theory, for more detailed and in-depth examination and explanation of these decisions.

4.3 End Game

Even as the initial three-year project comes to a close, SMITE looks to the future; testing its models against historic scenarios where the outcomes are already known, comparing the results of simulating said models with each other for technical consistency as well as to other models and simulations for accuracy, ideally with redesign of said models as necessary or desired to follow, with redeveloping the scenarios to run them in, and ultimately retest them until the results are clear and consistent.

If time, apparent success, and budgetary concerns permit, blind testing within the USAF and with sister services will be undertaken to both ensure a robustness of model behavior and simulation results, as well as to introduce SMITE to a wider audience while taking the edge off the "not invented here" syndrome.

Ideally, the future would entail software development of the SMITE training tool, to allow incorporation of advanced rules, include an automated scenario development tool kit, and generate automatic in-game documentation to lighten the mental data processing load of players, freeing them up to focus on learning as much as they can from their training.

5.0 CONCLUSIONS

While SMITE utilized the standard, established wargame design and development approach of analyzing the state of the art methodologies for measuring, monitoring, and wargaming COIN, it did not simply reproduce yet another "standard" wargame slaved to hard numbers and incapable of factoring-in the human equation.

SMITE has set out to make the United States Air Force a serious contributor to operational-level counter-insurgency, counter-terrorism, antiterrorism, and force protection training and operations. The USAF should be recognized the world over for its effectiveness and efficiency in these matters and SMITE has sought to do this by determining the best ways to measure progress in COIN operations, and then how to incorporate those measures into planning support tools, the building blocks of which have been sketched out in this report and the results of which have been included in the appendix, SMITE Game Theory, the reader's for consideration.

The truth is that much of what goes into wargames these days does not so much need to be re-written, just that more needs to be written about certain aspects. The things which wargames do well are not up for review here and no one is suggesting that modern warfare, irregular or otherwise, is no longer concerned with traditional aspects of combat.

The aspects outlined here of prevention, deterrence, detection, defending and defeating, and recovery do not themselves have to be included in the next generation of simulations as categories or characteristics; it is not necessary for an infantry brigade to have a measurable "prevention" factor, for example.

Rather, what is needed are applicable metrics for how actions taken by that brigade affect

the world around them beyond a simple combat strength test and in ways more nuanced than previously seen.

Prospective combat simulation software packages are not expected to present ideas in these terms specifically; one would expect to find traditional "force-on-force" factors such as attack, defend, experience, morale, etc. and so on.

What the new generation of smart, user-friendly wargames that SMITE embodies must now achieve is to see beyond traditional historical premises to better examine the issues identified here, issues which have not normally been incorporated into combat models.

Whether they have been bypassed or overlooked, these factors and their applicability to terrorism, insurgencies and resistance movements now make them necessary considerations when attempting to successfully model today's asymmetric warfare environment.

SMITE

Successfully Managing Insurgencies and Terrorism Effectively
GAME THEORY
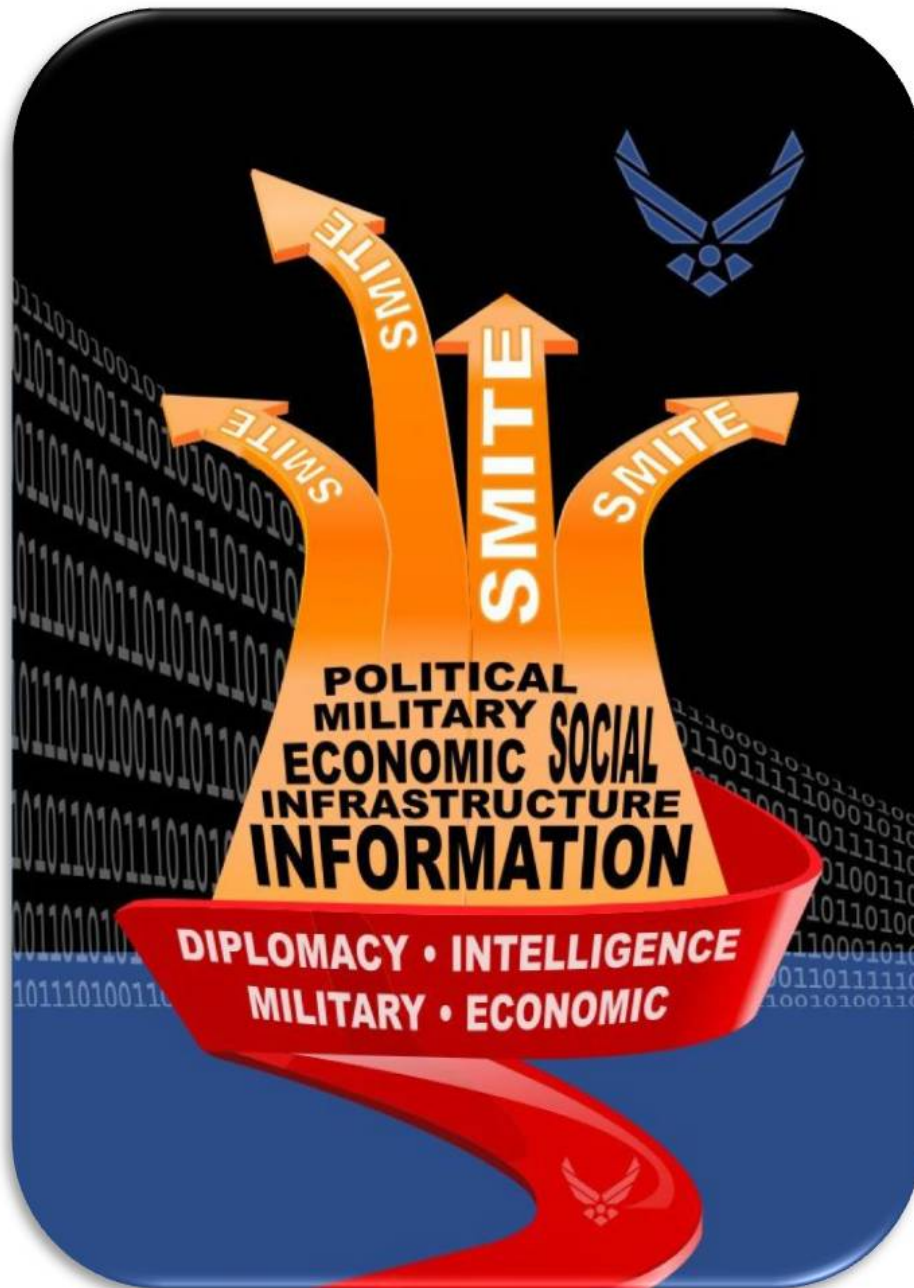
By: David O. Ross (AFRL) and Robinson C. Ihle (PAR)

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1.0 Introduction

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SMITE's findings and resultant theories are presented here.

1.1 Mission Statement

SMITE seeks to develop a war game to assist the examination of the applicability of new technology and TTPs and secondarily provide a modifiable tool useful for training, educating and assisting American and allied planners committed to COIN/CT & AT/FP efforts (hereafter referred to simply as "COIN").

SMITE assessed various hypotheses on how to measure progress in COIN operations; incorporating the most influential measures into planning support tools in new ways based on new ideas and technologies. Furthermore, SMITE analyzed state of the art methodologies for measuring, monitoring, and assessing COIN operations, tested them against both historical and potential COIN scenarios, and created a pen-and-paper wargame training tool as a result (see **Appendix D – SMITE Rules Set 1.0** for more).

1.2 Focus

SMITE focused its efforts primarily on the operational level of warfighting, maximizing the results of directing the program's energies toward prevention (as related to stabilization efforts), deterrence, detection, and the defense against/defeat of insurgent and terrorist campaigns; all with an eye towards ensuring that the current operational environment was made or remained amicable to post-conflict recovery efforts to be undertaken by other groups or agencies.

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2.0 Overview

Current wargames and simulations rely heavily on "hard" quantitative numbers while the resolution of insurgencies, terrorist campaigns, and similar activities depend on "soft" qualitative values such as cultural awareness of (and sensitivity to) indigenous societal values, and the perceived legitimacy of COIN actors and actions, among others[2].

2.1 The Relevance of the Problem

The majority of the Department of Defense's COIN work is done by the U.S. Army and the United States Marine Corps. They provide the bulk of the ground troops and the vast majority of American presence when the U.S. conducts such operations[3]. The USAF, while able to play an important role, often does not see itself as integral to the day to day nuts and bolts work of such campaigns, either by their preference or by exclusion at the hands of the other services[4].

While perhaps not immediately apparent, the relevance of COIN operations to the traditional USAF is direct and real; a closer look at today's Air Force reveals airmen in harm's way fighting and dying on the ground (Figure 1), with assets operating in environments where the front-line is everywhere, with no rear area in which to shelter. The Air Force has been slow in adjusting to this new reality, with national-level authorities such as the Secretary of Defense decrying an institutional "business as usual" attitude leading the perception of the USAF's poor contribution to current Overseas Contingency Operations (formerly referred to as the "Global War on Terrorism")[5]. When airmen are driving trucks for the Army instead of operating as airmen, it indicates to all that the USAF is not fully contributing its asymmetrical capabilities to conflict.

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GLOBAL WAR ON TERRORISM CASUALTIES BY MILITARY SERVICE COMPONENT -- ACTIVE, GUARD and RESERVE October 7, 2001 Through October 25, 2010												
		Army			Navy		Marines		Air Force			Totals
GWOT	CAS TYPE	USA	ARNG	USAR	USN	USNR	USMC	USMCR	USAF	ANG	USAFR	
OIF TOTALS		18,932	4,613	1,908	614	127	8,456	1,193	416	60	24	36,343
OIF	Hos Death	2,001	365	172	47	18	725	126	29	0	0	3,483
OIF	Non-Hos Dth	491	130	73	32	6	158	13	15	2	5	925
OIF	WIA	16,440	4,118	1,663	535	103	7,573	1,054	372	58	19	31,935
OND TOTALS		33	16	3	0	0	0	0	1	0	0	53
OND	Hos Death	2	0	0	0	0	0	0	0	0	0	2
OND	Non-Hos Dth	5	0	1	0	0	0	0	1	0	0	7
OND	WIA	26	16	2	0	0	0	0	0	0	0	44
OEF TOTALS		5,681	1,056	239	240	8	2,713	101	235	13	7	10,293
OEF	Hos Death	608	106	26	37	4	209	11	30	1	1	1,033
OEF	Non-Hos Dth	149	33	23	26	0	48	4	24	1	1	309
OEF	WIA	4,924	917	190	177	4	2,456	86	181	11	5	8,951

USA=Army Active; ARNG=Army National Guard; USAR=Army Reserve; USN=Navy Active; USNR=Navy Reserve; USMC=Marine Corps Active; USMCR=Marine Corp Reserve;
USAF=Air Force Active; ANG=Air National Guard; USAFR=Air Force Reserve
OIF=Operation Iraqi Freedom; OEF=Operation Enduring Freedom; OND=Operation New DawnHos=Hostile; Non-Hos=Non-Hostile; WIA=Wounded in Action

Figure 1: Current Overseas Contingency Operations Casualties by Service Component[6]; this timetable includes both periods of traditional, symmetric high-intensity conflict for OEF & OIF in which Air Force casualties were virtually non-existent; the majority have come after (i.e. during COIN operations).

2.2 The Nature of the Problem

Today's asymmetric warfare environment demands a new generation of smart, nuanced, user-friendly combat simulations that go beyond the historical premise of massive "force-on-force" operations. Although much work has been executed, there is still much to be done in order to support COIN activities.

Most traditional wargames deal primarily with easily identifiable threats such as tanks, infantry, and aircraft, represented by easily quantifiable values such as attack and defend strengths. In such a way, the modern symmetric conflict is easily and often well represented.

Representing asymmetric conflict can likewise be similarly broken down and modeled today *but only at the point of attack*; for instance when a terrorist detonates a suicide bomb or an insurgent's mortar round impacts outside of a police recruiting station, the strength of the explosion can be quantified and matched against the structural integrity of the recruiting station and surrounding buildings, the sentry wearing body armor standing guard and the unarmored recruits waiting in line. What is usually not clearly understood are the operational and strategic impacts of such attacks.

Limiting oneself to such representation is reactionary and futile. This is somewhat analogous to learning how to box by being taught how to take a punch – and nothing else.

So while surviving such attacks may or may not be touched upon, what is not been widely addressed at the operational level is how such attacks could be prevented, deterred, detected, defeated or recovered from, much less how to model such processes.

Why is this?

There are many things that wargames already do well; most anything "hard science" related -- such as ballistics, armor density, sensor capabilities, and so on -- are already well understood and measured in modern simulations.

Likewise, many of the "social science" aspects of military life (such as morale, combat experience, etc.) are ably represented in several good examples of today's wargames.

While things that are already done well can always be improved upon, this project concentrated on the factors that have not been well explored in military simulations.

Although some of the contributing factors as to how insurgencies and terrorism can be avoided or survived from have been identified, few have been successfully quantified and subsequently matched for modeling purposes at the operational level.

2.3 The Nature of the Solution

For a solution, SMITE starts with a well known theory, PMESII (see section 3.2), and introduces two concepts that were refined during SMITE's development: PD3R and a mapping of the spectrum from chaos to governance explored at the operational level. These theories and concepts are explored below.

SMITE puts forth the concept that the scope of COIN can be broadly divided into the five general phases of Prevention, Deterrence, Detection, Defense/Defeat, and Recovery (PD3R)[7]. These phases are not strictly linear and there is much overlap between them. If the operating environment is not geared towards preventing terrorism or insurgency, it is best to be able to deter it, and if it is not to be deterred, then it is best if one is able to detect it before it strikes. Whether or not a nascent insurgent movement or terrorist campaign is detected before it first

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strikes, one must be able to defend against those strikes when they come, and defeat those

Figure 2: The nominal life-cycle of Counterinsurgency, Counterterrorism, Antiterrorism and Force Protection.

movements and campaigns as they arise. After the fact, the operating environment must be allowed to recover.

Whether a single tactical attack or an entire strategic campaign is being considered, much of Prevention is simply Recovery procedures minded by civil institutions before a terrorist campaign or insurgency has flared-up; whereas much of what's to be done for the sake of Recovery is the military simply conducting Preventative measures after insurgents or terrorists have done their damage. Service members, well-trained in the more immediate aspects of Prevention, will be well-equipped to handle the initial stages of Recovery, ideally before handing the job over to international and domestic civil institutions and actors.

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2.4 The Solution in Theory

There is no need to review the theory behind these conceptual steps again in their entirety, for now we will examine them as broadly-based and wide-ranging ideas. Once we have illuminated the theoretical elements of these proposed stages, we will look to their practical application and contemplate methods of measurement before going on to examine the ways and means of how to model them effectively.

As mentioned previously, the stages or steps being explored are: Prevention, Deterrence, Detection, Defense/Defeat, and Recovery.
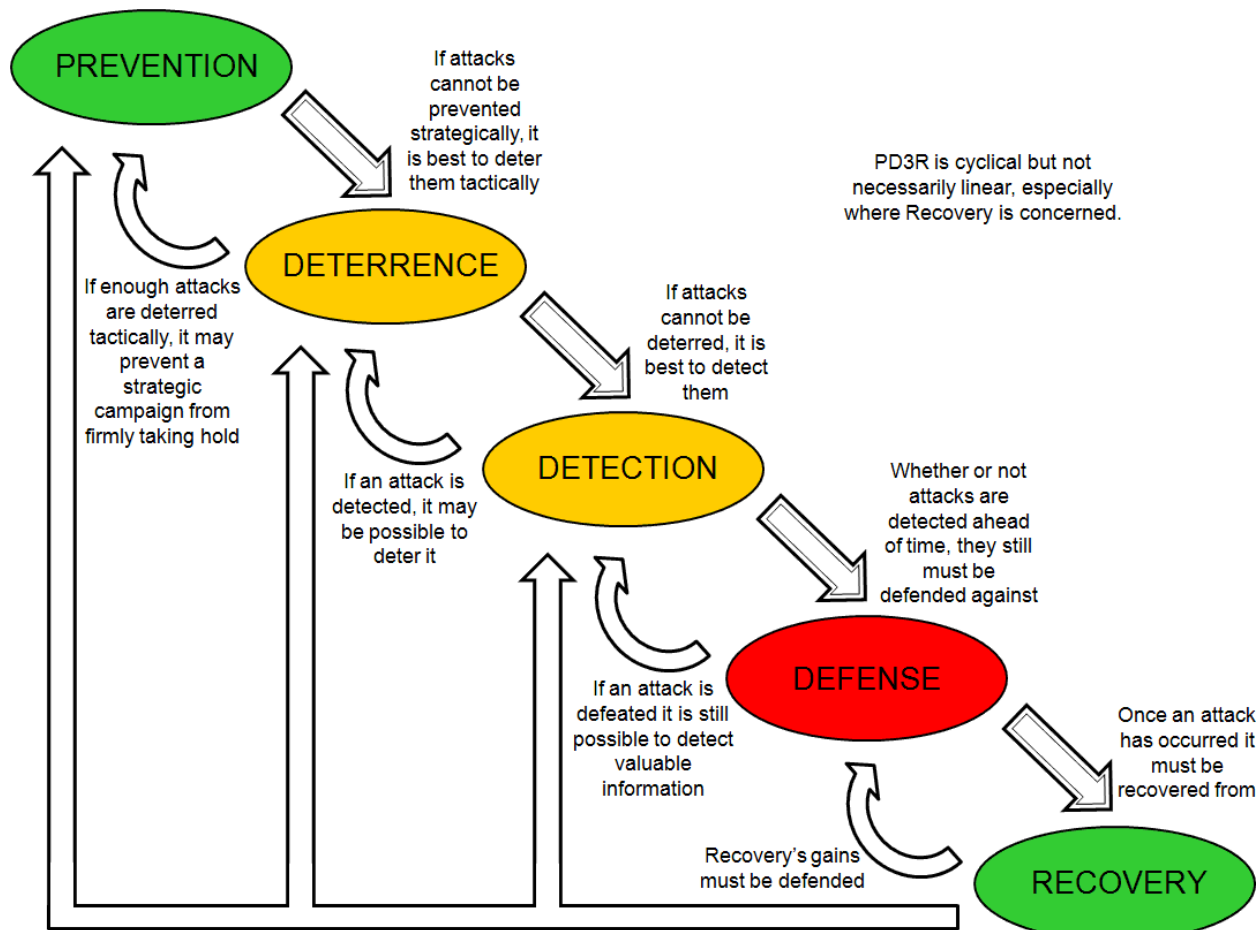
Figure 3: PD3R is something of a "Jacob's Ladder," with the end (Recovery) encompassing the beginning (Prevention), and vice-versa.

2.4.1 Prevention:

Insurgencies and terrorism may take place in most any environment, but they take root most easily where people feel disenfranchised, un-empowered and often disconnected. The less a part of society one may perceive themselves to be, the less beholden to society one may feel. In many cases, such self-exclusionary affectation develops into nothing more than ennui or anti-social behavior, whether minor (bad attitude) or major (violent crime). In the worst cases, however, this can develop into the willingness to plan and act against society and the social order as a whole[8].

Prevention then is affecting the societal factors which inhibit such poisonous attitudes from growing; those which encourage the empowerment of its citizenry[9]. They include security,

stability, a market economy, the rule of law, the rise of the middle class, and, ultimately, participatory democracy in a cumulative progression, with each step needing to build on the ones coming before it[10].

Even when the implementation of preventative measures is outside the scope of troops' responsibilities, they should still be familiar with what kind of environment best prevents insurgencies and terrorism from taking root in a community or population, in order to better practice economy of force (such as having aircraft conduct shows of force instead of actually dropping ordinance, etc.) thus minimizing allocation of effort where it is both not needed and potentially counter-productive.

Building a preventative society or community is not a panacea; even the most uninviting environment to terrorism and insurgency may still spawn insurgents and terrorists and may still suffer from their actions. A fully enfranchised citizenry reduces the likelihood of those feelings and attitudes arising that bring about such violently anti-social behavior but does not eliminate them[11].

2.4.2 <u>Deterrence</u>: Deterrence -- in this case the ability to influence potential insurgents and terrorists not to act against American or allied interests -- is about perceptions of power and, like the exercise of power, can be practiced in both hard and soft forms.

The whole point behind hard deterrence is to intimidate your opponent, and whether the environment is street-corner tactical or global geopolitics, the message you are sending is "the risk is not outweighed by the reward." Hard deterrence is typically force related, whether it be direct action (i.e. combat), patrols and sweeps supported by on-demand close air support (CAS) and uninhabited aerial vehicle (UAV)-based sensor saturation orbiting overhead in the air, or checkpoints and fortifications.

Soft deterrence is the oft-derided "hearts and minds" aspect of antiterrorism. However, fixation on failures of practice (e.g. Vietnam, Iraq) should not be allowed to justify dismissal in theory; and so soft deterrence needs to be represented in any potential model. After all, short of genocide, you can't kill your way out of an insurgency.

Soft deterrence includes overt acts like airlifting mass quantities of relief supplies, running neighborhood medical clinics or repairing and providing public services, but also relatively subtle actions such as learning the local language or dialect, or even a few words and phrases. Being familiar with local cultures and customs, and being sensitive as to where you route your logistics flights so as not to offend local sensibilities with noise issues, are other examples. Soft deterrence is not just winning people over, but can also be as simple as avoiding offending them[12].

Richard D. Howard (private collection)
Figure 4: Safety can be found "inside the wire," but not victory.

Deception is also a form of deterrence. Whether it be hard or soft, resulting in ambushing insurgents or fooling terrorists into wasting resources on phantom targets or scaring them away

with a bluff of some kind, misdirecting them with psychological operations, or spoofing them with specially tailored Commando Solo broadcasts, the less they feel they can trust their information, the more hesitant they will be to act upon it. That hesitation and potential dissuasion is the deterrence value derived from effective deception[13].

2.4.3 Detection: Detection is information-based and therefore part of the intelligence gathering effort. With the ever-increasing coverage available from uninhabited aerial vehicles and remotely-placed sensors (whether air-dropped or emplaced by Special Forces, etc.) and the ever-growing online presence of terrorist and insurgent groups, the technical capability to gather raw information has never been greater. While the technical aspects of sensor-based intelligence gathering is well represented in wargames and does not bear further examination here, new ideas for the practical application of such information does. Similarly, human intelligence (HUMINT) gathering efforts have been long under-utilized – often due to the misperception that HUMINT can only come from highly-trained "James Bond" type spies[14].

While deep-cover agents may provide excellent information from time to time, to successfully gather useful HUMINT in COIN operations, all that is needed is a local presence and the ability to exploit it effectively. Likewise, effective exploitation of information gathered from all sources can best be made by exploiters who are familiar with the local communities and cultures within which they operate, not only gathering more and better information, but exploiting and distilling it into actionable intelligence more quickly and efficiently, as familiarity with local sociopolitical dynamics will allow gatherers and exploiters to more easily cut through the high ambient "noise level" inherent in modern information collection, separating the wheat from the chaff.

VIRIN 090425-N-9156C-102
Figure 5: Forging an effective local presence through the practice of soft deterrence.

2.4.4 Defense/Defeat: Traditional combat actions taken to incapacitate, kill or capture adversaries are at once both the most and least traditional aspect to be modeled -- and the one providing the least bang for the developmental buck -- the ability to defend against a tactical attack is basically built on hard deterrence actions, such as posting guards and flying CAPs, which in turn are made relevant by detection; both of which can be augmented by experience and training (and both of which in turn feed back to augment deterrence and detection). Likewise, the ability to defend against a strategic terrorist or insurgent campaign is built on defeating not only their actions, but more importantly, their ideas[15].

While little is new in modeling the mechanics of this aspect of an attack (explosion versus wall, MANPADS versus aircraft, etc.) what is important is to bear in mind that those previously unexamined effects of combat must now begin to be taken into consideration here.

This is more than simply tracking combat experience and morale sliders; there are the

deterrent effects of direct action, the detective values of being exposed to new insurgent tactics, local area knowledge gained via experience (or lost via casualties, transfers, rotations, etc.), trust or mistrust built within the local community, adapting to a foreign environment while under the stress of combat, and so on.

An attack is much more than a simple matching contest between each side's strength, and it needs to be treated as such. Similarly, a strategic victory is much more than a simple aggregation of tactical victories.

That being said, the occurrence of an attack is not the final stage in the chain of events involving an attack; one must also consider the aftermath and how it is handled. This is recovery.

2.4.5 <u>Recovery</u>: Recovery is essentially an effort to return to Prevention-type security and stability. Note that while the PD3R (Prevention, Deterrence, Detection, Defense/Defeat, Recovery) event chain is not strictly linear, it *is* cyclical, with Prevention and Recovery sharing many of the same long-term goals; Prevention focusing on the time before an attack or campaign, Recovery focusing on the time afterwards, though with enough time passing between events Recovery can be said to bleed into Prevention (when "before" is "before the next").

How our forces react immediately post attack can have preventative effects if they restore order swiftly and surely, and can have soft deterrence effects if they do not overreact or if they make a point of tending to civilian casualties and damage. How our forces react immediately post attack can have hard deterrence effects should they visibly recover quickly and consistently (as insurgents and terrorists may lose heart if they see no long-term effect of their efforts), as well as having detective value if they are able to catch insurgents or terrorists who are attempting to flee the area[16].

How does one measure whether/when a neighborhood, community, or society has recovered from an insurgency or from a terrorist campaign? At what point in the PD3R event chain is it safe to say "it is now time to bring our forces home?"

If the desired end-state is that after one year of stability (however stability is defined), all forces will be withdrawn and returned home, that then is the measure. However, a society made stable only by the presence of outside armed forces is not likely to survive their absence and those forces are more than likely to have to return in time. The real answer lies in a society's inherent ability to prevent; when a society is structured in such a way as to prevent terrorism and insurgencies from arising, it is no longer dependant on external assistance[17].

The structural aspect of a society's recovery on a strategic scale cannot be over-emphasized; a stable society is not installed or ordered from the top-down but rather builds upon itself from the bottom-up. It is not the holding of elections which ensures democracy; rather it is the stable and secure social institutions which can bring about those elections and ensure they are held democratically[18].

Similar to Defense and Defeat, Recovery is less a new concept than a concept in need of

VIRIN 100918-A-0350A-159
Figure 6: Elections do not make a Democracy – established civil institutions do.

new attention.

3.0 The Solution in Practice

While the concept of PD3R aided the design of the wargame, the constraints of the basic paper and pencil game format precluded the inclusion of an explicit PD3R chain of events. The event chain concept became a set of guidelines for assessing what was happening within and throughout the operating environment and why, rather than an actual framework to be followed. It is intended to be the "how to know who's winning" yardstick meant to give meaning to an operation's chosen metrics as they are measured.

For instance, if we are steadily detecting attacks and defeating them, then in part that should tell us that we are not preventing or deterring attacks effectively. Likewise, if we can observe a market economy begin to thrive and flourish in an area, it can then be assumed that at least a degree of comparative security and stability has taken hold from the perspective of the region's populace[19].

Speaking of a region's populace, before we look to employ SMITE's theories in the operating environment, let us look at those who populate it. For ease and clarity, SMITE divides the denizens of the operating environment into the four broad groups of "adversaries," "allies," "the people," and finally "U.S. forces."

"Adversaries" are all those arrayed against us: not just the insurgent and the terrorist, but also the criminal and the malcontent as well. Note that "adversary" is distinct from "enemy" – while adversaries can be reformed or co-opted, enemies quite simply have to be killed or driven-off. SMITE seeks to address COIN in such a way as to minimize our enemies' numbers while maximizing the chances our adversaries will stop fighting of their own accord.

Non-government organizations (NGOs) active in the operating environment which either look to undermine the U.S. presence, or whose goals otherwise run counter to the end-state desired by U.S. Forces, would also be considered "adversaries." Foreign militaries actively opposing U.S. or allied forces would naturally fall into this category as well.

"Allies" refers to not only to other nations' military forces acting in concert with our own towards a commonly shared goal, but also to those NGOs which are active in the operational environment and who either liaise directly with U.S. Forces, or have goals which complement the goals of U.S. Forces in the area.

"The people" are simply those civilians who live in the operational environment and have not otherwise already affiliated themselves as either adversaries or allies. They are, in essence, the "battleground" over which is fought in COIN operations. While perhaps the easiest group to define, they are the hardest to understand, and much of SMITE is dedicated to understanding them, their needs, and their motivations.

Richard D. Howard (private collection)

Figure 7: Peaceful and positive interaction with the people can pay many dividends.

"U.S. Forces" consists of all individuals, military or otherwise, in the employ of the U.S. government who are active in the operating environment for any reason.

One vital entity has not been specified here, and that is the host nation in which operations would be taking place. This is due to the likely nature of most host nations; nations which are host to COIN operations are nations which have been traumatized (if not devastated) by warfare, insurgency and terrorism and are often riven with factions and dissent. As such they are somewhat analogous to wounded animals, functioning poorly and behaving unpredictably, and by their actions may present as allies or as adversaries in any given situation. To try to paint them as highly functional organizations with consistently rational actors, always in lock-step with U.S. desires, belies the probable reality of the situation[20]. Nonetheless the host nation is a state actor and can have serious impact on COIN operations. In scenario design, it may be useful to make the Host Nation a separate faction.

3.1 What is Practical?

Now to look and see how these concepts fit practically into SMITE's current pen-and-paper format, both in how applicable they are to the projects' goals, as well as in ways to measure our effectiveness in achieving them.

Security as we define it is an overtly military activity, as is Stability; at least in its initial stages. The growth of a market economy, the rise of a middle class, and the societal evolution towards participatory democracy are simply not activities with which the armed forces should have to concern themselves, as far as guiding or otherwise overseeing. That is not to say that they will not be called on to *secure* such activities, or to ensure local *stability* at times for these activities to begin to grow, but that again is because security and stability are military and paramilitary/civil activities, respectively.

Figure 8: Deterring, detecting, and defending. VIRIN 100827-A-5370B-008

Prevention has some clear-cut aspects which lend themselves quite readily to traditional military warfighting skills, while others are much more abstract and harder to address using military methods.

Deterrence, Detection, and Defense are all wholly applicable to the SMITE project, as they are military actions that are well practiced and understood, and are utilized by armed forces (both regular and irregular) the world over.

Recovery, as mentioned before, is in many ways similar to Prevention, and as to the question of what is practical, the answer is the same: security and stability operations. Whether it is securing a neighborhood after an attack occurs or a nation after an insurgency breaks out, or stabilizing a town after a riot, or a state after a natural disaster, security and stability operations are stock in trade for military forces.

The more advanced aspects of Recovery rapidly morphs in to the same kind of militarily abstract factors as economic growth, local governance, etc. that one would see in the later stages of Prevention.

Again, while it is believed all stages of this process are critical to the long-term success of COIN operations, not every aspect of every stage falls within the bounds of this project.

3.2 PMESII

The familiar PMESII (Political, Military, Economic, Social, Infrastructure, and Information systems) model[21] will serve as the backbone for the employment of SMITE's theories. As mentioned above, the PD3R event chain need not be specifically enumerated in order for it to be adhered to; rather, it is being used to put our PMESII-based metrics in the proper context to allow better determination of whether the desired end-state goals are being achieved and why or why not.

Each PMESII system is briefly described, in context with SMITE, below.

Political covers not only traditionally organized political parties and popular movements but also any internal divisions and subgroups within those organizations, as well as other sufficiently powerful unifying forces which lend themselves to mass participation and wielding influence outside of their own members or associates.

Military is concerned with any organized marshalling and employment of deadly force on behalf of, or against, a particular political or social group; whether their means are conventional or unconventional, regular or irregular, symmetric or asymmetric, kinetic or non-kinetic, or any combination thereof.

Economic deals with trade, commerce and the exchange of goods and services at both the macro and micro level; primarily among organizations and institutions, but also among individuals as applicable.

Social is large groups or organizations which wield power and influence amongst their own members for reasons and purposes intrinsic to membership in said groups or organizations.

Infrastructure compromises the physical and virtual means by which societies are enabled, the basic physical and organizational structures needed for the operation of a society or enterprise, and the services and facilities necessary for an economy to function (e.g. roads, water supplies, sewers, power grids, telecommunications, and so forth).

Information is any means of transmitting or otherwise imparting knowledge or data from one individual or organization to another for any purpose. "Information" is an especially wide-ranging system which is integral to the day-to-day functioning of the other five PMESII systems as mentioned above; though consideration and utilization of the information-centric aspects of the other five systems will be restricted to the "Information" system as much as possible.

3.4 Metrics and Measurements

What SMITE has gathered to date through its research and interviews with organizations involved in various aspects of the counter-insurgency and counterterrorism fields[22] is an appreciation of the amorphous nature of recognizing (and tracking) progress or regress in the COIN realm – not necessarily something which can be easily pegged to strict numerical benchmarks, such as how many troops are in theater, adversary body counts, the number of villages "pacified," and the like.

Instead SMITE will step through the abstract operational and tactical considerations of

the PMESII construct (again, Political, Military, Economic, Social, Infrastructure, and Information), covering each constituent system as it applies to each of SMITE's population groupings, and explore possible metrics to consider when relating how each applies to the SMITE event chain. The list below was not meant to be exhaustive, but rather serve as a foundation to build upon as data was collected, models built, simulations tested, and concepts validated.

Political considerations regarding *our adversaries* can include factionalism, changing allegiances, infighting and opportunism.

Terrorist organizations and insurgent groups (not to mention criminal organizations) are not monolithic entities or single consciousness; they are groupings of individuals, each with its own ideas and attitudes. Beyond the nature of individuals, many adversarial organizations operate under marriages of convenience, counting on hate of a common foe to paper-over differences amongst themselves. Other adversaries are simply trying to take advantage of the chaotic situation to further their own ends, and are not really looking for a fight. These fault-lines, if detected, can be

VIRIN 091025-F-6350L-238
Figure 9: The ability to cultivate allies from adversaries and the apathetic is crucial.

manipulated. As we observe the latter, we gain the measure of the former.

Political considerations regarding *our allies* can include their own rules of engagement (ROE), their knowledge of U.S. ROE, and potentially conflicted loyalties or agendas.

U.S. allies have their own considerations and their own responsibilities, to say nothing of their own cultural norms, and those must always be kept in consideration. If a U.S. ally offers troops for support services only (i.e. not for combat), then sending them on patrol in a hostile area would not only constitute breaking faith with that ally (possibly resulting in withdrawal of their support), but would also place those allies' troops, as well as the people in the area they were patrolling, in grave danger.

Conversely, it's possible that U.S. allies would have their own agendas or loyalties, and a region (if that ally had a past history in that region; say as a former colonial power with pre-existing political contacts in the region).

Political considerations regarding *the people* can include the emergence of civil governing institutions.

It is important to realize that once the people are given power over themselves, they may no longer appreciate a U.S. or allied presence. If this occurs at a local or regional level, some degree of recourse may be available at the national level; but in any event, great care must be taken to show respect for indigenous civil authority when it asserts itself -- even when it does so in a difficult or disagreeable fashion -- lest the entire U.S. and allied effort be taken for a sham;

likely with disastrous results.

Political considerations regarding *U.S. Forces* can include mitigating potential interference from the home front, while at the same time being cognizant of maintaining its support.

While a VIP touring the middle of a warzone may be terribly disruptive to previously laid plans and a drain on resources, those VIPs, when treated well, tend to be the most effective domestic supporters of the war effort and its budgetary

VIRIN 080923-F-1830P-005
Figure 10: The popular voice may not always agree with U.S. or allied interests.

requirements once all is said and done, to say nothing of their ability to either influence public opinion beneficially or, barring that, shield decision-makers from hostile public opinion. It behooves the deployed leaders of U.S. Forces to keep that in mind when state governors, congressmen and women, and senators come calling.

Military considerations regarding *our adversaries* can include their recruiting, training, equipment, and their actions and operations.

Some questions to consider: do our adversaries recruit out of the local population, or do they rely on foreign fighters, or both? Are they able to recruit the able-bodied to fight or do they have to get by with manipulating the mentally disabled for suicide missions? Do they have enough recruits to sustain their losses? Are they getting better at what they do or worse? Are they well trained by the time they're deployed, or is their training trial by fire? Where did they get their equipment from initially and where do they get it from as their campaign progresses? Do they have the same suppliers for small arms as they do for heavy weapons? What is their ammunition situation? Can they make their own and if not, where is it coming from? Is their ops tempo increasing or decreasing? Are they capable of sustained action or do they go to ground after every encounter?

Military considerations regarding *our allies* can include special capabilities or knowledge and special reputations.

For example: are there jungle specialists available when operating in a tropical climate? Was an infantry brigade promised but combat engineers delivered instead? Have units operated in the area previously under different circumstances (UN peacekeeping,

Richard D. Howard (private collection)
Figure 11: Allies must work with U.S. and host nation forces, as well as the people.

etc.) and as such are familiar with the terrain and the people? Are there troops with an especially fearsome reputation which could be put to good use intimidating insurgents and reassuring the population with their presence? Or is their reputation fearsome among the local people for some reason, in which case they should be kept out of certain areas so as to not antagonize the people?

Military considerations regarding *the people* can include the formation of militias.

Care must be taken to determine what purpose civilian militias serve. If they are raised for self-defense, over-reacting could turn them against U.S. and allied troops, whereas under-reacting could instill a sense of abandonment among the local populace. If they are raised for ethnic or sectarian warfare, or if they are raised in coordination with insurgents or terrorists, they need to be disarmed and demobilized, and the core grievances addressed constructively before the situation spirals out of control.

Military considerations regarding *U.S. Forces* can include special capabilities or knowledge and special reputations.

Much as with allied contingents, the U.S. would do well to remain cognizant of their troops' specialties, prior experiences, and reputations with both their adversaries and the people.

Economic considerations regarding *our adversaries* can include their finances and supplies.

For instance: do they have wealthy patrons who shower them with money regardless of their operational performance, or is their agenda competing in the marketplace of ideas and they must show consistent results (mass casualty attacks, battlefield victories, etc.) in order to continue garnering funds from less emotionally involved sponsors? Do they operate underground economic activities such as kidnapping for ransom, smuggling, and narcotics, which, if exposed, could help turn the people against them, or do they operate comparatively aboveboard, attempting to integrate into the local populations? How is their wealth stored (as currency, in kind, virtually, etc.)? How is it transferred (couriers, hawala, online, etc.)? How is it spent, where and for what?

Economic considerations regarding *our allies* can include whether or not, from a budgetary perspective, their support is worth having.

Quite simply, are they worth the effort to continue supporting in-theater? Are they a help or a handicap compared to the cost of keeping them on hand? Regardless, how can they be most efficiently employed?

Economic considerations regarding *the people* can include at what economic level they exist, from poverty to prosperity, as well as how economically sophisticated they are

ShutterStock 24584728
Figure 12: Entrepreneurship may have to be promoted, nurtured and protected.

as a population.

Do the people have the basics they need to subsist and survive? Are they prospering? Are they thriving? Do they even know how, or have years of repression and flawed economic theories rendered them helpless in the face of a capitalist economic model? Culturally, can they comprehend more advanced economic principles, from property ownership to contract law, or is their word still their only bond? Are their livelihoods based on illicit acts (coca cultivation, smuggling, tending poppy fields, running email scams, etc.), to which we need to offer viable alternatives? Are they being set up to be taken advantage of, or will they be able to enjoy the fruits of U.S. and allied labors?

Economic considerations regarding *U.S. Forces* can include budgetary concerns.

Some representative questions are: is the operational budget being exceeded? Is that excess being supported politically or is it coming out of the next appropriations cycle? Is the money being well spent or is it being wasted? Can the money be better spent elsewhere? Is money being under or over utilized as a tool in the COIN campaign?

Social considerations regarding *our adversaries* can include cultural sensitivity and popular support.

It is not just the U.S. and her allies who are concerned about the will of the people; successful insurgents and terrorists well know that gaining their support is key to long-term victory. Are they careful in their targeting or do they bomb indiscriminately? Do they alienate the people with their actions or rally them to their cause? Do they follow and observe the same social and religious guidelines as the locals, or are they haughty and arrogant towards them? Are they winning the people over, or cowing them into submission?

Social considerations regarding *our allies* can include cultural sensitivity and popular support, as well as prejudices and historical enmity between different allied nations.

Concerns about cultural sensitivity and popular support are much the same as with terrorists and insurgents; i.e. assuring that allied forces are respectful of local custom as much as it does not conflict with military necessity, and ensuring they try to win the people to their side. Past colonial relations may be an aid or an obstacle.

Another consideration when working in a coalition environment is whether or not different allied nations get along with each other and are able to work together, or if they will be ineffective due to preoccupation with old rivalries and the perception of scores to settle.

Social considerations regarding *the people* can include cultural norms and taboos.

What are the social protocols which we need to be

VIRIN 101003-F-4684K-102[3]
Figure 13: Relief operations benefitting the local population often result in goodwill.

aware of? Are the people superstitious? Are there folklore, legends, or prophecies which may reflect, positively or negatively, on U.S. and allied forces, or on our adversaries? How do U.S. and allied forces ensure they are presenting themselves in such a way that avoids offending the people while at the same time clearly communicating their benign nature and munificence?

Social considerations regarding *U.S. Forces* can include cultural sensitivity and popular support.

Again, as with both adversaries and allies, working with the people and getting them to work with you is the vital component of a favorable, sustainable, long-term resolution of any irregular warfare situation.

Infrastructure considerations regarding *our adversaries* can include identifying high value targets, cultural sensitivity, and their own needs.

Questions to be considered are: what do they perceive as vital to destroy in the furtherance of their own efforts? What do they think of as key to our efforts that they need to take away from us? Conversely, what aspects of the civil infrastructure do they rely on? For example, do they need the waterways clear to be able to smuggle supplies and fighters into an area?

Are they targeting culturally significant sites in an attempt to provoke wider violence or discredit U.S. and allied efforts? Or do they hold the same beliefs and scrupulously avoid damaging such places? Even if they do not target cultural significant areas, do they take advantage of them; e.g. basing them of them in hopes that U.S. and allied forces will be too sensitive to local perceptions of "violating" them while searching for evidence of insurgent, terrorist, or criminal activity?

Furthermore, what of their own infrastructure? Where are the bomb factories, where are the recording studios, where are the safe houses, where are the server farms, where are the so-called "rat lines" used to covertly move people about, and so forth?

Infrastructure considerations regarding *our allies* can include possible foreign ownership, cultural sensitivities, and awareness of prior regime symbols.

Do our allies own assets in-country which they seek to protect? Do such considerations have an impact on military planning and execution? Are they being culturally aware and not basing next to forbidden areas where they are not welcome and where their presence agitates and offends the people? Are they careful not to damage historic or religiously important sites when at all possible, or are they wanton in their destruction, turning the people against their efforts? Finally, are they occupying building or sites associated with the prior regime's corrupt rule, or are they making a point to break with the people's past perceptions of power?

Infrastructure considerations regarding *the people* can include economic necessity, as well as religious and culturally significant sites.

Are basic services being delivered to the people? If not, is it due to allied or U.S. inertia or terrorist and insurgent attack? Does that even matter to the people or do they just want it fixed now? Do they see their cultural and religious heritage being respected or being debased? How are they reacting to that? Are the people holding the insurgents responsible for doing the debasing or the U.S. and their allies for not protecting them? Or both?

Infrastructure considerations for *U.S. Forces* can include cultural sensitivities and awareness of prior regime symbols, as well as more general basing considerations.

Much the same as with our allies, do U.S. Forces take care around sites crucial to a population's sense of identity and are they associating themselves with a prior discredited regime by the locations they chose for basing? Similarly, are the basing decisions made by U.S. authorities taking host nation cultural sensitivities into consideration; including proximity to significant sites or areas, noise mitigation and traffic management, and the potential for collateral damage caused by being attacked or defending oneself?

VIRIN 091114-F-9351O-245

Figure 14: Until the people can provide for themselves someone must provide for them.

Information considerations regarding *our adversaries* can include their internal communications for both political and military matters, whether or not their propaganda message is getting out and whether or not they are able to collect on us.

What is their web presence? How great is their cyberpower?

Is adversarial propaganda being distributed, and if so, how (radio broadcasts, DVDs, websites, etc.)? If it is, is anybody watching or listening? If it is being accessed, is it being persuasive? If so, to whom: the people? Our allies? The press? The (U.S.) home front? In short, are they winning the "message war?"

Also, what information do our adversaries have on us? How are they collecting it (HUMINT, COMINT, phishing, social engineering, etc.)? Are they collecting on us in ways we can reasonably eliminate or mitigate (OPSEC, COMSEC, network security, and so on)? Conversely, could we take advantage of their communication and propaganda mechanisms and their collection methods to in-turn collect on them, or to feed them misinformation?

Information considerations regarding *our allies* can include whether or not they have special cyberpower capabilities which we can take advantage of, and whether or not their message is getting out and whether or not they leak information; and if so, to whom.

Do our allies have pre-existing relationships in the region due to past experiences? Does that give them a special insight in to how to communicate with the people or how to counter terrorist propaganda? Or is their prior relationship a poor one, making them particularly ill-suited to try and reach out to the local populace?

Does that pre-existing relationship in the region lead to conflicting loyalties? If so, do they seek to protect those with whom they have a relationship, and do they do so at the expense of information or operational security? Or is an ally pursuing their own agenda in the international media and using information in that aspect?

Information considerations regarding *the people* can include whose messages do they have access to, whose are they listening to, and if they have a message of their own.

Are the people equipped to hear a message in the way it is distributed? If one is sent over the internet or the airwaves, do the people have internet access, radios or TVs? If pamphlets are distributed, can they read? Regardless of how they receive the message, do they even listen to it? Is one side losing the idea war even before they begin fighting it? If so, how can that be taken advantage of or turned around? Finally, do the people have a voice of their own and do the U.S. and their allies (or their adversaries for that matter) listen to it? Is there a pre-existing infosphere to fight over, or are the people unfamiliar with the concept?

Information considerations regarding *U.S. Forces* can include their own cyberpower capabilities, network security issues, whether their message is getting out and also if they are collecting information on their adversaries as well as collecting information about the people.

Again, as with adversaries and allies, winning "the message war" is crucial for success.

Also, as with adversaries, intelligence collection is vital to being able to measure one's opponent.

Richard D. Howard (private collection)
Figure 15: Proper distribution of the proper message requires the proper tools.

Even more crucial is collecting accurate information on the people, to judge their disposition and the effects COIN operations are having on them; good, bad, or indifferent.

4.0 Game Application

What is the practical application of so much "soft data?" What has been learned that is really important to include? What needs to be modeled to ensure a comprehensive, if not innovative, training aid?

While potential answers to these questions are explored here, the reader is encouraged to examine **Appendix D – SMITE Rules Set 1.0**, for a more concrete demonstration of practical application.

4.1 What to Model?

Any action by any group (or "faction") in the COIN realm has three components: means, motive, and opportunity. "Means" is fairly well understood and modeled. "Opportunity" is also well understood, but can be more subjective based on the actor's actual objective. Why this goal, or "Motive," is traditionally the least understood and least well represented in wargames. SMITE seeks to change that.

Often what motivates an individual or group will influence who they choose to associate with, as those with common interests naturally tend to gravitate towards one another. During times of peace and prosperity these natural social groupings tend to be benign and largely

inconsequential where the smooth operation of a modern society is concerned. However, once a society or state is placed under the pressure of ongoing insurgency or terrorism campaigns, these societal "fault lines" can give rise to factions and factionalism; especially among our adversaries and the people. We would be wise to look for the fault lines between and within groups, so as to be able to avoid or exploit them as best suits us.

The general population groupings (adversaries, allies, the people, and U.S. forces) in which SMITE places the various actors in the COIN realm do not represent monoliths from which no one can diverge, but rather general categories from which factions can be modeled.

Depending on a group or faction's interests they may be concerned with one, some, or all of the "yardsticks" which measure the road between a chaotic situation such as an insurgency or terrorist campaign and a stable government; as a faction's interests are more clearly defined the U.S. and its allies gains a better idea of the most constructive way(s) to address that faction in furtherance of U.S. efforts towards the desired end-state.
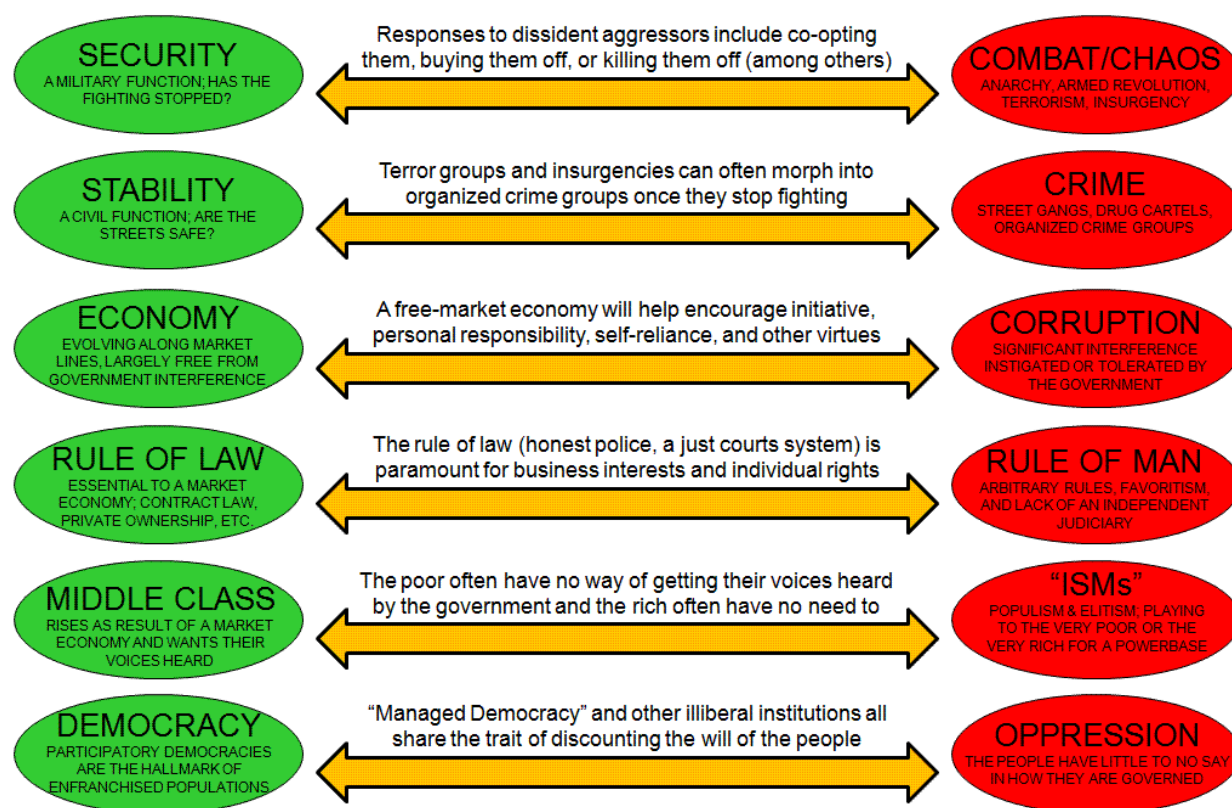
Figure 16: The "yardsticks" which mark progress from chaos to governance.

SECURITY (A MILITARY FUNCTION; HAS THE FIGHTING STOPPED?)	Responses to dissident aggressors include co-opting them, buying them off, or killing them off (among others)	COMBAT/CHAOS (ANARCHY, ARMED REVOLUTION, TERRORISM, INSURGENCY)
STABILITY (A CIVIL FUNCTION; ARE THE STREETS SAFE?)	Terror groups and insurgencies can often morph into organized crime groups once they stop fighting	CRIME (STREET GANGS, DRUG CARTELS, ORGANIZED CRIME GROUPS)
ECONOMY (EVOLVING ALONG MARKET LINES, LARGELY FREE FROM GOVERNMENT INTERFERENCE)	A free-market economy will help encourage initiative, personal responsibility, self-reliance, and other virtues	CORRUPTION (SIGNIFICANT INTERFERENCE INSTIGATED OR TOLERATED BY THE GOVERNMENT)
RULE OF LAW (ESSENTIAL TO A MARKET ECONOMY; CONTRACT LAW, PRIVATE OWNERSHIP, ETC.)	The rule of law (honest police, a just courts system) is paramount for business interests and individual rights	RULE OF MAN (ARBITRARY RULES, FAVORITISM, AND LACK OF AN INDEPENDENT JUDICIARY)
MIDDLE CLASS (RISES AS RESULT OF A MARKET ECONOMY AND WANTS THEIR VOICES HEARD)	The poor often have no way of getting their voices heard by the government and the rich often have no need to	"ISMs" (POPULISM & ELITISM; PLAYING TO THE VERY POOR OR THE VERY RICH FOR A POWERBASE)
DEMOCRACY (PARTICIPATORY DEMOCRACIES ARE THE HALLMARK OF ENFRANCHISED POPULATIONS)	"Managed Democracy" and other illiberal institutions all share the trait of discounting the will of the people	OPPRESSION (THE PEOPLE HAVE LITTLE TO NO SAY IN HOW THEY ARE GOVERNED)

Simply giving U.S. and allied forces a grasp on the motivating factors of the various players in a given COIN operation and keeping an eye on the ways in which the members of those factions are united or divided is not enough; there is still the unexpected to have to deal with, incorporated in SMITE by including random events.

Random events in SMITE are kept fairly generic and most are fairly typical of the petty aggravations and small victories experienced in day-to-day COIN operations and are drawn from the full PMESII spectrum as well as touching on things such as weather and terrain effects also.

Truly significant random events which are seen to have a low probability of occurring but would have a high impact if they did -- such as the 2004 Abu Ghraib photo scandal, Spain's 2004

elections altering their troop commitment in the wake of the Madrid train bombings, or the 2006 bombing the Golden Mosque of Samarra – are also abstracted and can still be mitigated by focusing on preparing for their potential effects, as opposed to trying to predict when/if said event will happen.

Even after SMITE has endeavored to identify for its audience what drives COIN's relevant actors, make them aware of those groups' internal dynamics, and prepare players for how to deal with the unexpected, there has to be an idea of what winning (i.e. "Victory Conditions") actually looks like.

For the scope of SMITE's purview (i.e. military actions), "winning" is more nuanced than just the official declaration of the end of major combat operations and the beginning of stabilization efforts; once concerted efforts to destroy or subvert the state by armed force have been eliminated and the indigenous forces of the host nation are willing and able to maintain order, the traditional military mission is done.

This is true even in the face of continued violence, as long as it is *criminal* violence to be handled by the police. Consider "insurgency-like" activities which take place in the U.S. even today which are dealt with at the law-enforcement level (albeit sometimes with serious firepower) such as street gangs, organized crime groups, poachers, militias, and so on.
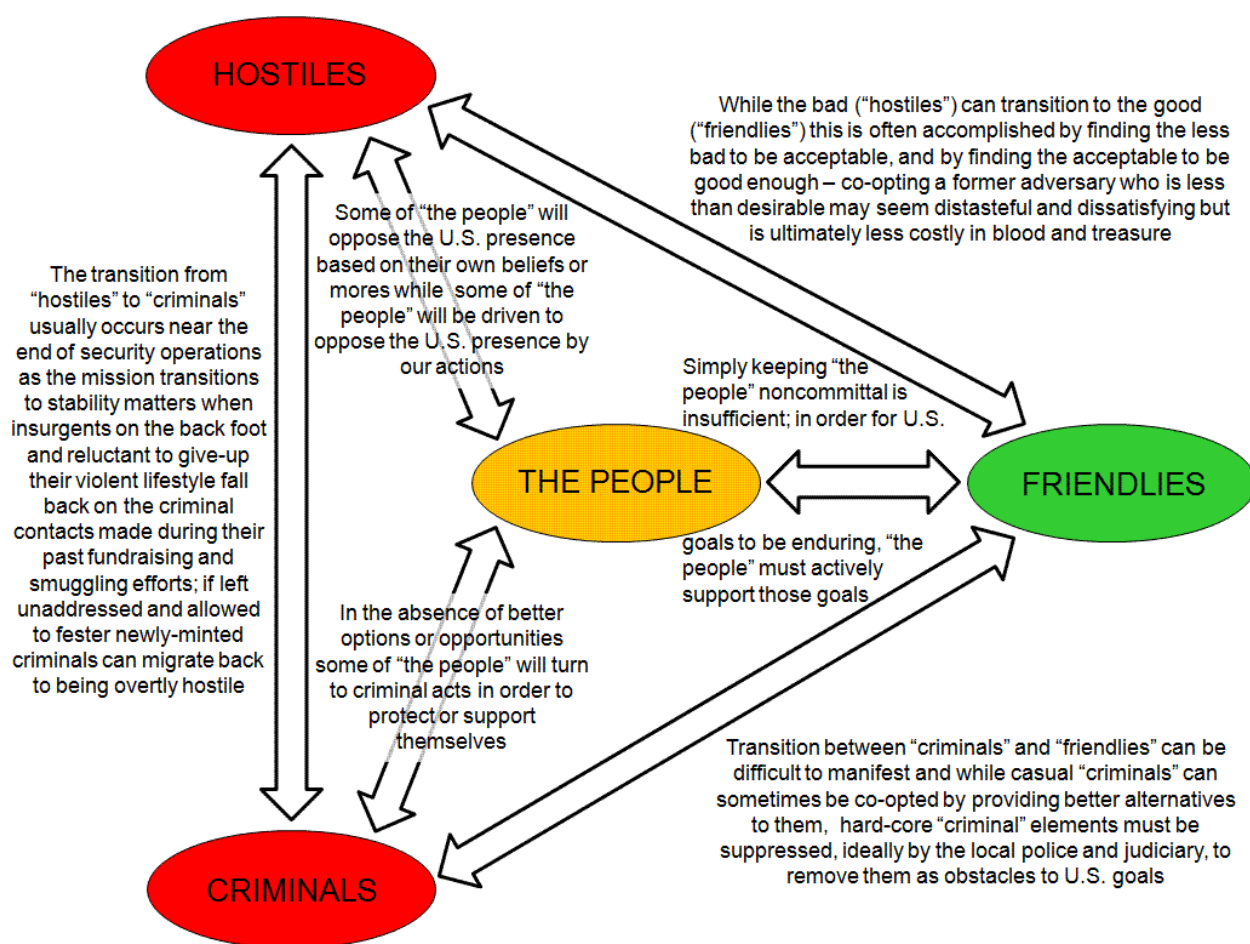

Figure 17: A broad-based look at the more common faction "fault lines" and the motivators for factionalism.

4.2 How to Model It?

The SMITE simulation training tool focuses its efforts primarily on the operational level of warfighting which offers an excellent mix of both the strategic and tactical without being too encumbered by the pitfalls of either. The simulation takes the long view of conflicts to discourage short-term, short-sighted decision making, and stresses the importance of non-kinetic options. This prompts the warfighter to take fuller advantage of all the assets at their disposal.

A multiplayer format, supporting competing and cooperating factions, was necessary to properly reflect and represent the chaotic "shades of gray" nature of most modern COIN situations which would not play-out reasonably as simple two-sided black-and-white affairs.

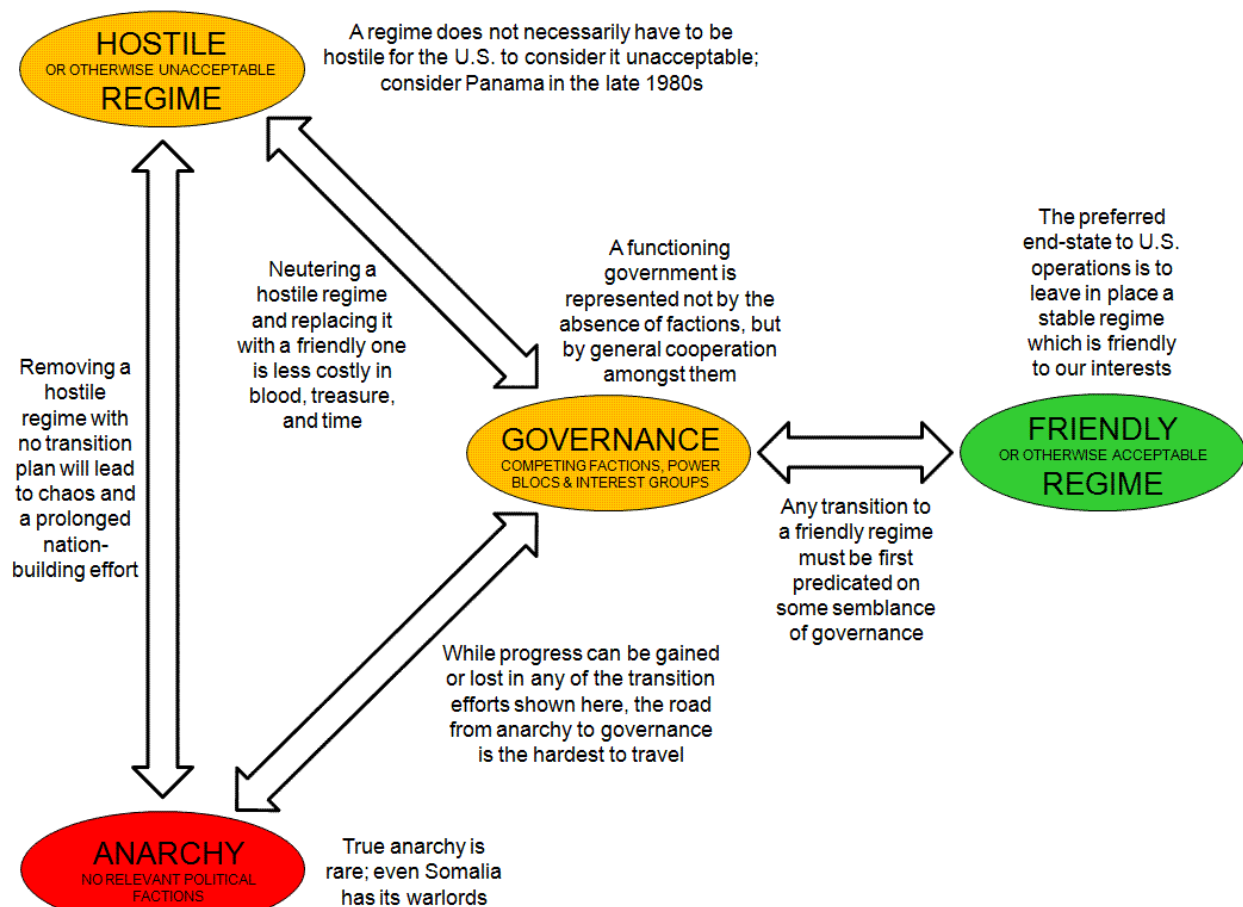SMITE's first edition pen-and-paper (PnP) format and utilization of cards and dice as

Figure 18: U.S. and allied COIN efforts have the ultimate aim of transitioning the host nation to a stable, friendly regime.

playing pieces was born out of a desire to encourage physical proximity of players and direct engagement with one another over the course of the game, greatly facilitating the exchange of ideas and expediting the learning process, while still allowing for easy randomization, keeping game mechanics visible and readily modifiable, and providing a degree of self documentation.

Readers are again encouraged to explore **Appendix D – SMITE Rules Set 1.0** for more detailed and in-depth examination and explanation of these decisions.

4.3 End Game

Even as the initial three-year project comes to a close, SMITE looks to the future; testing its models against historic scenarios where the outcomes are already known, comparing the results of simulating said models with each other for technical consistency as well as to other models and simulations for accuracy, ideally with redesign of said models as necessary or desired to follow, with redeveloping the scenarios to run them in, and ultimately retest them until the results are clear and consistent.

If time, apparent success, and budgetary concerns permit, blind testing within the USAF and with sister services will be undertaken to both ensure a robustness of model behavior and simulation results, as well as to introduce SMITE to a wider audience while taking the edge off the "not invented here" syndrome.

Ideally, the future would entail software development of the SMITE training tool, to allow incorporation of advanced rules, include an automated scenario development tool kit, and generate automatic in-game documentation to lighten the mental data processing load of players, freeing them up to focus on learning as much as they can from their training.

5.0 Summary

While SMITE utilized the standard, established wargame design and development approach of analyzing the state of the art methodologies for measuring, monitoring, and wargaming COIN, it did not simply reproduce yet another "standard" wargame slaved to hard numbers and incapable of factoring-in the human equation.

SMITE has set out to make the United States Air Force a serious contributor to operational-level counter-insurgency, counter-terrorism, antiterrorism, and force protection training and operations. The USAF should be recognized the world over for its effectiveness and efficiency in these matters and SMITE has sought to do this by determining the best ways to measure progress in COIN operations, and then how to incorporate those measures into planning support tools, the building blocks of which have been sketched out in this report and the results of which have been included in **Appendix D – SMITE Rules Set 1.0** the reader's for consideration.

5.1 Conclusion

The truth is that much of what goes into wargames these days does not so much need to be re-written, just that more needs to be written about certain aspects. The things which wargames do well are not up for review here and no one is suggesting that modern warfare, irregular or otherwise, is no longer concerned with traditional aspects of combat.

The aspects outlined here of prevention, deterrence, detection, defending and defeating, and recovery do not themselves have to be included in the next generation of simulations as categories or characteristics; it is not necessary for an infantry brigade to have a measurable "prevention" factor, for example.

Rather, what is needed are applicable metrics for how actions taken by that brigade affect the world around them beyond a simple combat strength test and in ways more nuanced than previously seen.

Prospective combat simulation software packages are not expected to present ideas in these terms specifically; one would expect to find traditional "force-on-force" factors such as attack, defend, experience, morale, etc. and so on.

What the new generation of smart, user-friendly wargames that SMITE embodies must now achieve is to see beyond traditional historical premises to better examine the issues identified here, issues which have not normally been incorporated into combat models.

Whether they have been bypassed or overlooked, these factors and their applicability to terrorism, insurgencies and resistance movements now make them necessary considerations when attempting to successfully model today's asymmetric warfare environment.

Appendix A.
Definitions of Terms:

All definitions are taken from JP 1-02 "Department of Defense Dictionary of Military and Associated Terms" (http://www.dtic.mil/doctrine/jel/new_pubs/jp1_02.pdf).

Anti-Terrorism – Defensive measures used to reduce the vulnerability of individuals and property to terrorist acts, to include limited response and containment by local military and civilian forces.

Counter-Insurgency – Those military, paramilitary, political, economic, psychological, and civic actions taken by a government to defeat insurgency.

Counter-Terrorism – Operations that include the offensive measures taken to prevent, deter, preempt, and respond to terrorism.

Force Protection – Preventive measures taken to mitigate hostile actions against Department of Defense personnel (to include family members), resources, facilities, and critical information. Force protection does not include actions to defeat the enemy or protect against accidents, weather, or disease.

Grand Strategy – A document approved by the President of the United States for developing, applying, and coordinating the instruments of national power to achieve objectives that contribute to national security.

Operational Level of War – The level of war at which campaigns and major operations are planned, conducted, and sustained to achieve strategic objectives within theaters or other operational areas. Activities at this level link tactics and strategy by establishing operational objectives needed to achieve the strategic objectives, sequencing events to achieve the operational objectives, initiating actions, and applying resources to bring about and sustain these events.

Strategic Level of War – The level of war at which a nation, often as a member of a group of nations, determines national or multinational (alliance or coalition) strategic security objectives and guidance, and develops and uses national resources to achieve these objectives. Activities at this level establish national and multinational military objectives; sequence initiatives; define limits and assess risks for the use of military and other instruments of national power; develop global plans or theater war plans to achieve those objectives; and provide military forces and other capabilities in accordance with strategic plans.

Tactical Level of War – The level of war at which battles and engagements are planned and executed to achieve military objectives assigned to tactical units or task forces. Activities at this level focus on the ordered arrangement and maneuver of combat elements in relation to each other and to the enemy to achieve combat objectives.

Appendix B.
Citations:

      The authors wish to note that in the many cases of compound citations attached to individual statements or paragraphs, the citations identify sources most significant to forming the ideas expressed heretofore and are not simply indicative of specific quotes or passages.

      Compound citations are listed alphabetically by author/editor. Cited sources included in Appendix C, Annotated Bibliography, have only their authors/editors and titles given. Citation of material not otherwise included in Appendix C is provided with full bibliographical information.

      Photographs used in this report are cited as they appear. Figures 4, 7, 11 and 15 are generously donated by Lieutenant Colonel Richard D. Howard of the 152nd Air Operations Group, New York Air National Guard. All captions are the author's and not necessarily representative of a photographer's thoughts, intentions, or beliefs regarding their photographs.

      The SMITE cover and game graphics were designed by Keri L. Burkhart (AFRL).

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Appendix C.
Annotated Bibliography:

Introduction
This bibliography annotates all the works which have contributed to the formation of the theories and practices outlined in this report.

While many are not actually cited all have played their part, large or small, in making SMITE what it is today.

Where a work's impact may not be immediately apparent or is quite specific, illustrative commentary is provided.

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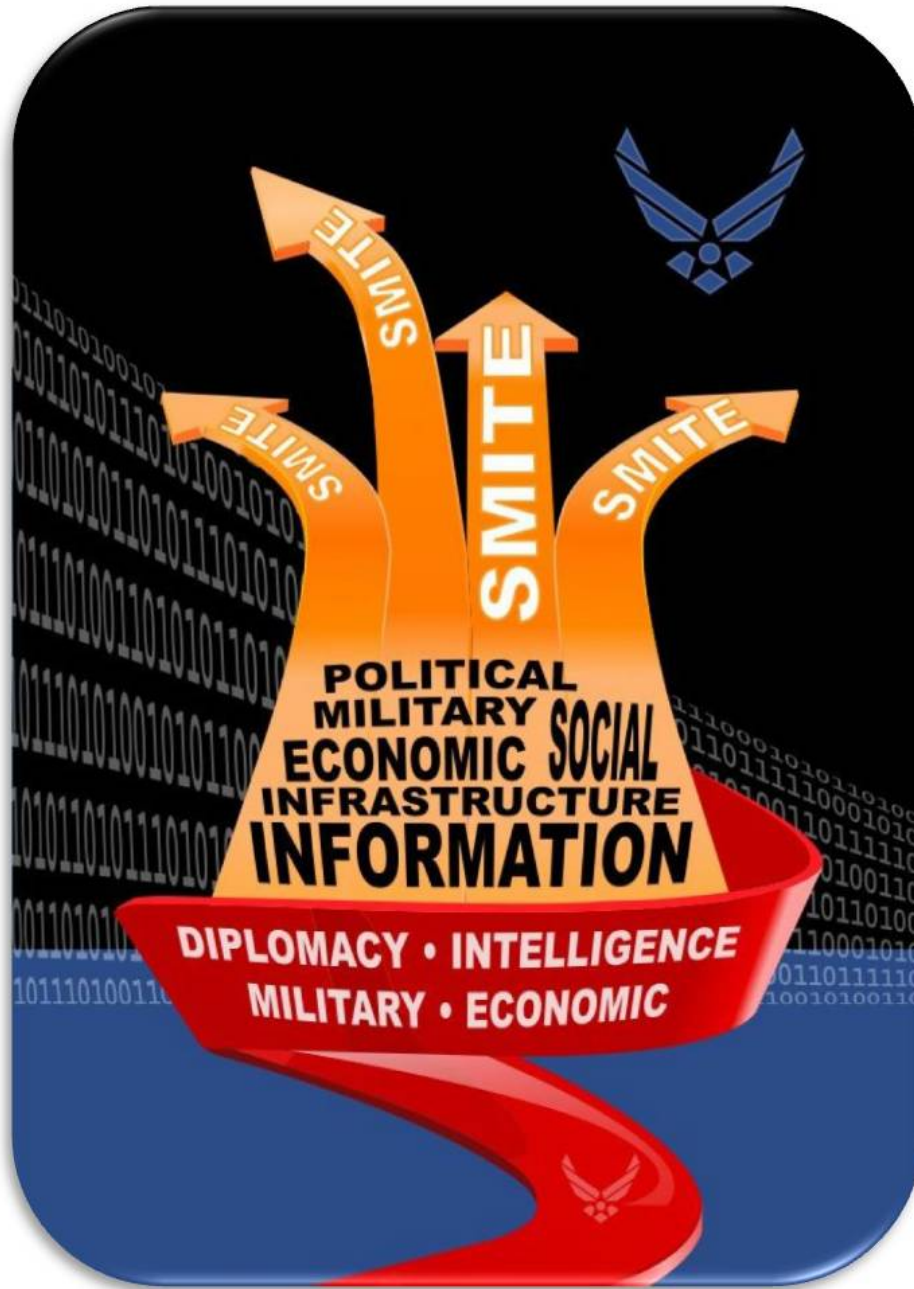
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SMITE

Successfully Managing Insurgencies and Terrorism Effectively

RULES SET 1.0

By: David O. Ross (AFRL), Scott R. Lingley (PAR), and Robinson C. Ihle (PAR)

Contents:

1.0 Introduction

Welcome to the Successfully Managing Insurgencies and Terrorism Effectively (SMITE) simulation training tool!

SMITE is the result of a thirty-six month effort from October 2007 through September 2010 funded by the Air Force Office of Scientific Research (AFOSR) and developed at the United States Air Force Research Laboratory's (AFRL) Rome Research Site (RRS) located in Rome, New York, drawing on a broad spectrum of government, military, contractor, and civilian expertise.

1.1 SMITE's Perspective

SMITE seeks to function as an innovative and essential contributor to counter-insurgency (COIN) (and the related activities of counter-terrorism [CT], antiterrorism [AT], and force protection [FP]) conduct and training, educating and assisting American and allied planners in allocating and justifying resources committed to COIN/CT & AT/FP efforts (hereafter referred to simply as "COIN"), increasing the effectiveness and efficiency thereof.

SMITE focuses its efforts primarily on the operational level of warfighting which offers an excellent mix of both the strategic and tactical without being too encumbered by the pitfalls of either, takes the long view of conflicts to discourage short-term, short-sighted decision making, and stresses the importance of non-kinetic options, thereby prompting the warfighter to take fuller advantage of all the assets at their disposal.

SMITE's first edition pen-and-paper (PnP) format and utilization of cards and dice as playing pieces was born out of a desire to encourage physical proximity of players and direct engagement with one another over the course of the game, greatly facilitating the exchange of ideas and expediting the learning process, while still allowing for easy randomization, keeping game mechanics visible and readily modifiable, and providing a degree of self documentation. Comments, suggestions, corrections, new scenarios, et cetera should be addressed to David.Ross@rl.af.mil.

Players and scenario designers should be aware that SMITE only describes Who to utilize and What should be accomplished, while indicating generally When and possibly Where, but not How. We leave How (the hard part) as an exercise to the practioners.

2.0 Key Concepts

As SMITE employs new and different ideas in new and different ways, there are several key concepts upon which the game is based that the player may not be already familiar with and so are described here.

2.1 PMESII

The Political, Military, Economic, Social, Infrastructure, and Information (PMESII) system of systems model serves as SMITE's theoretical and operational backbone.

Political covers not only traditionally organized political parties and popular movements but also any internal divisions and subgroups within those organizations, as well as other

sufficiently powerful unifying forces which lend themselves to mass participation and wielding influence outside of their own members or associates.

Military is concerned with any organized marshalling and employment of deadly force on behalf of, or against, a particular political or social group; whether their means are conventional or unconventional, regular or irregular, symmetric or asymmetric, kinetic or non-kinetic, or any combination thereof.

Economic deals with trade, commerce and the exchange of goods and services, primarily among organizations and institutions, but also among individuals as applicable.

Social is large groups or organizations which wield power and influence amongst their own members for reasons and purposes intrinsic to membership in said groups or organizations.

Infrastructure compromises the physical and virtual means by which societies are enabled, the basic physical and organizational structures needed for the operation of a society or enterprise, and the services and facilities necessary for an economy to function.

Information is any means of transmitting or otherwise imparting knowledge or data from one individual or organization to another for any purpose. "Information" is an especially wide-ranging system which is integral to the day-to-day functioning of the other five PMESII systems as mentioned above; though consideration and utilization of the information-centric aspects of the other five systems will be restricted to the "Information" system as much as possible.

2.1.1 Information Operations: Information in general (and "intelligence" in the military sense in particular) plays a significant role within SMITE and is embodied in-game by the "Information Operations" (IO) concept as an enabler for most in-game actions. IO will be more thoroughly discussed and demonstrated in section **6.0 Mission Execution**.

2.2 PD3R

SMITE puts forth the idea that the scope of COIN can be broadly divided into five general categories of Prevention, Deterrence, Detection, Defense/Defeat, and Recovery (PD3R). These categories are not strictly linear and there is much overlap, but they are ordered after a certain logic.

If the operating environment is not geared towards preventing terrorism or insurgency, it is best to be able to deter it, and if it is not to be deterred, then it is best if able to detect it before

Figure 1. The PD3R COIN lifecycle.

it strikes. Whether or not a nascent insurgent movement or terrorist campaign is detected before they first strike, one must be able to defend against those strikes when they come and defeat
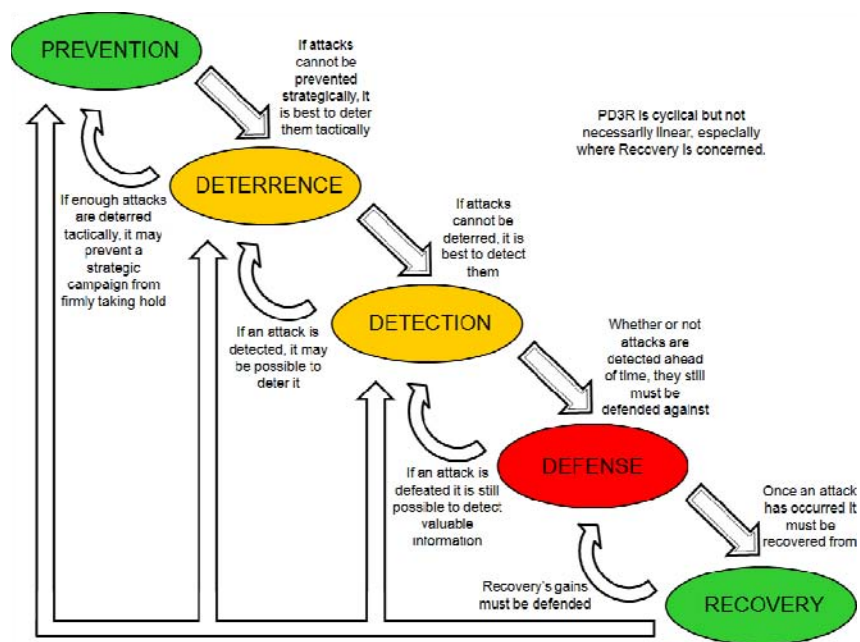
those movements and campaigns as they arise. After the fact, the operating environment must be allowed to recover.

2.2.1 Prevention: While building or restoring a preventative society or community is the ultimate goal in U.S. COIN operations, it is not a panacea; even the most uninviting environment to terrorism and insurgency may still spawn insurgents and terrorists and may still suffer from their actions. A fully enfranchised citizenry reduces the likelihood of those feelings and attitudes arising which bring about such violently anti-social behavior but does not eliminate them.

Figure 2. The road from chaos to governance.

Instead, what must be measured are the factors which inhibit such poisonous attitudes from growing; those which encourage the empowerment of its citizenry. They include security, stability, a market economy, rule of law, rise of the middle class, and, ultimately, participatory democracy in a cumulative progression with each step needing to build on the ones before it.

Even when the implementation of such preventative measures are outside the scope of troops' responsibilities, they should still be familiar with what kind of environment best prevents insurgencies and terrorism from taking root in a community or population in order to better practice economy of force (such as having aircraft conduct shows of force instead of actually dropping ordinance, etc.). This minimalises allocation of effort where it is both not needed and potentially counter-productive.

2.3 The Game Board

SMITE's Game Board is a physical manifestation of the abstract struggle of wills between player Factions in the game.

The Game Board is laid-out in a hexagonal "ring system," with each ring symbolizing a step between chaos and some form of
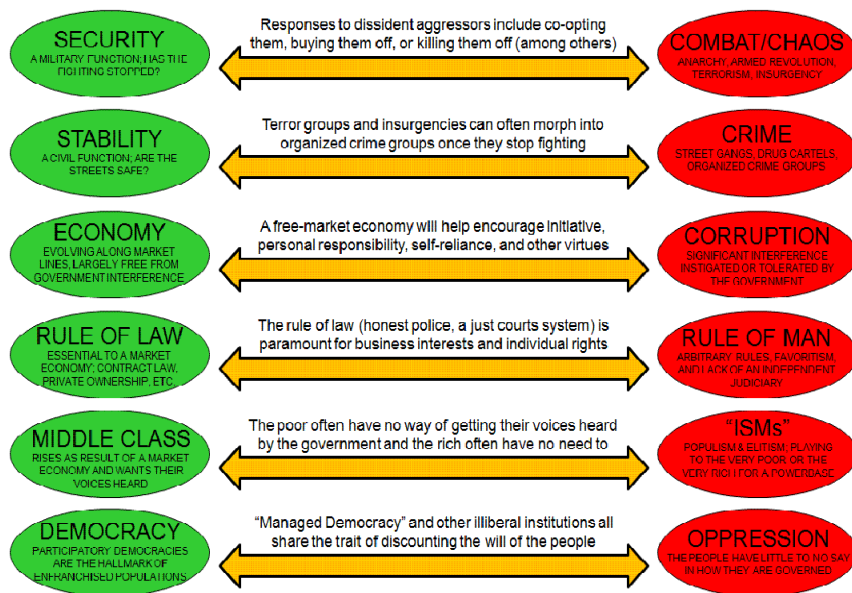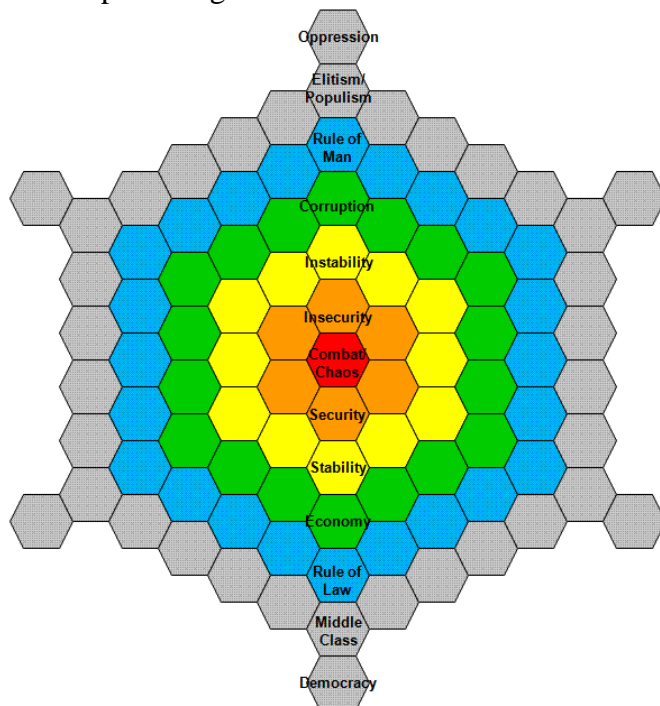

Figure 3. Nominal two-player Game Board illustrating the ring system arrayed between generic "Democracy" and "Oppression" Factions.

governance and each corner a potential "home hex" to a Faction's sphere of influence, the symbolic seat of their ideological presence in the game. A chit tied to each asset is used to represent the political and stability level that those assets are currently at.

2.3.1 <u>Terrain Maps</u>: Some Scenarios take place in areas where terrain has such a significant impact on Game play that maps are produced to ease the players' burden of keeping track of Asset location and what terrain effects need to be considered at any given time.

3.0 Terminology

Building off SMITE's Key Concepts, above, the main elements of game play terminology are introduced here, with historical examples provided here to show how the pieces fit together.

3.1 Scenarios

A SMITE "Scenario" is the representative simulation framework of a given conflict and involves such things as location (and whether or not special terrain maps are needed), length (i.e. number of turns), number of and identity of Factions and their Patrons, beginning Political Will, the quantity and quality of available Assets, and Victory Conditions.

SMITE is played-out in Scenarios and all kinds of conflict may be modeled. Any situation where multiple actors compete over disputed resources (people, land, political power, etc.) is suitable for SMITE.

3.1.1 <u>Turns and Seasons</u>: To accommodate weather trends SMITE considers each instance of every player in the game having had a turn at acting to represent three months, constituting one of the four seasons (winter, spring, summer, fall).

As such, each player gets one turn per season, or four turns per year.

3.2 Factions

A "Faction" in SMITE represents a player's side or team and embodies individuals and organizations which roughly share the same point of view and desire the same general end state in a given Scenario.

SMITE is played-out amongst Factions and can currently support up to six in a Scenario, covering the spectrum of interests and allowing them all to impact the resolution of the Scenario.

3.2.1 <u>The Population</u>: Comprising those people who are present but not actively participating in a conflict, the "Population" is a non-player Faction included in almost all SMITE Scenarios; often a side must gain control of or win the allegiance of the people to achieve a lasting victory.

> **Scenarios, Factions, and Patrons: The Malayan Emergency, 1948-1960**
>
> The Malayan Emergency was a guerilla war fought between the armed forces of the Commonwealth of the United Kingdom and the Malayan National Liberation Army (MNLA), the military arm of the MCP, or Malayan Communist Party.
>
> The United Kingdom opposed a communist takeover of Malaysia and conducted a successful COIN campaign to prevent it, defeating the insurgents and swaying the will of the people against the insurgents.
>
> In simulating this conflict the SCENARIO would be located in Malaysia, beginning in 1948, and running for 36 Seasons (four turns per player per year).
>
> Player FACTIONS would include the Commonwealth Troops and the MNLA. The Population would be present as a non-player FACTION.
>
> The supporting PATRONS would be The United Kingdom on behalf of their Commonwealth Troops Faction, and the MCP backing its MNLA Faction.

3.3 Patrons

In SMITE a "Patron" is the powerbase which provides each player Faction its moral and material support. Sometimes the relationship is concrete such as a national government supporting its army in the field, and sometimes it is more abstract, such as an array of funding sources enabling a terrorist organization operating in a third-party country.

Every player's Faction has a Patron to whom they are responsible.

3.4 Political Will

"Political Will" is SMITE's quantification of a Patron's dedication to its Faction and how invested in the current struggle (i.e. the Scenario being played) they are, or can afford to be. It is, in essence, the motivation to carry on and see things through, or the lack thereof.

Political Will also functions as the "currency" a Faction may spend on pursuing their goals and may be expended procuring Assets or conducting Missions. It may be lost due to campaign failures or earned through successes. Political Will may be targeted by opposing Factions as well as modified by random events.

3.5 Assets

An "Asset" in SMITE represents a functional grouping of people or things which are at the disposal of a Patron and their Faction. Assets often have capabilities in multiple PMESII systems, but usually excel in only one or two. Some do not function independently but serve to modify the capabilities of others when employed in concert together.

While a Patron may make many assets available to their Faction, that Faction may not be able to make use of all their available Assets, possibly because they are inappropriate given what the Faction is trying to accomplish, or maybe they are not effective against the strategies opposing Factions are employing, or perhaps the Faction in question simply lacks the Political Will to deploy all the Assets they would like.

3.5.1 <u>Population Assets</u>: "Population Assets" embody those parts of the Population Faction which are available for Player Factions to influence within the scope of the game.

While normally passive, Population Assets may be employed and directed by a Player's Faction if they are consistently successful at influencing

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Political Will, Assets, and Missions: The Soviet War in Afghanistan, 1979-1989

In 1979 the Soviet Union occupied Afghanistan at the request of elements of the fragmented Afghan national government, touching off a decade-long conflict with the indigenous *Mujahedeen* resistance movement.

While the Soviet Union would serve as Patron to their Occupation Forces Faction, the United States (in time joined by other western and Arab nations) emerged as the Patron for the Mujahedeen Faction.

POLITICAL WILL in this scenario was the Occupation Forces' Achilles heel; denied meaningful successes on the battlefield and ill-equipped to otherwise counter the Mujahedeen insurgency, the Soviet Patron eventually tired of the seemingly never-ending fight and in the end withdrew support for its Faction's efforts.

POLITICAL WILL for the Mujahedeen was never really an issue; with fighting contained within Afghanistan, no fear of a wider war, and with support for the Mujahedeen limited to information and material, their U.S. Patron was exposed to no real risk and therefore never saw a need to stop supplying them.

The ASSETS available to the Soviet Union's Occupation Forces were primarily military in nature, vast in quantity, and initially much more sophisticated than those available to the Mujahedeen; the United States eventually supplied their Faction with Military ASSETS specifically intended to counter Soviet advantages in firepower. Furthermore, for all their material superiority, the Occupation Forces dedicated few Economic or Infrastructure ASSETS to the conflict and were never able to match the Mujahedeen in Political, Social or Information-based ASSETS.

Using the Assets available to them the Soviet-backed Occupation Forces conducted Military MISSIONS for the most part, seldom engaging the Population. The Mujahedeen, once supplied with suitable Assets, were able to blunt the affect of many Soviet military MISSIONS and were consistently able to run effective Social and Political MISSIONS against the Occupation Forces.

them.

3.6 Missions

Most Faction actions in SMITE are represented by a "Mission." There are four main Mission aims, those of influencing, strengthening, or weakening Assets, as well as operating in the infosphere (collecting intelligence, protecting secrets, disseminating propaganda, and so on).

A Mission's effect is further focused by what PMESII system (Political, Military, Social, Economic, Infrastructure, Information) the executing Faction chooses to frame it in.

The number of Missions a Faction may conduct on a given turn depend in part on the types of Missions selected, in part of the on the Assets available to the Faction with which to conduct Missions, and in part of outside influences (random events, etc.).

3.7 Victory Conditions

The "Victory Conditions" in SMITE define not just the desired end-state a Faction is working towards in the long run, but can also illuminate shorter-term goals which benefit Factions by demonstrating behavior conducive to the way in which that Faction seeks to achieves their long-term success.

In addition, realizing short-term goals may yield additional Assets or earn extra Political Will for a Faction as the Scenario progresses.

4.0 Getting Set-up

The SMITE game system is meant as a generic guide for simulating conflict resolution and while much of the information necessary for framing a given conflict's Scenario is unique and specific to its own history and circumstances, there are some fundamental "Turn 0" basics which all Scenario set-ups share in common and they are given here.

4.1 Game Pieces

SMITE is a card game which utilizes a Game Board as a tracking mechanism and 10-sided dice to generate random numbers.

Pencils or pens and paper are considered useful to aid the player in recording information (mostly running tallies on Political Will and Victory Point totals, gains, and losses) as the game progresses, but are not supplied.

> **Victory Conditions: The Vietnam War, 1955-1975**
>
> The United States' involvement in Indochina was predicated on halting communist aggression against South Vietnam and stretched from 1955 when the first advisors were committed through 1975 when South Vietnam finally fell.
>
> During that time North Vietnam, first aiding and then absorbing rebels in the south, while themselves receiving copious amounts of aid from the USSR and the PRC, remained committed to unifying Vietnam under communist rule.
>
> The VICTORY CONDITIONS the United States laid out for its end state in this Scenario (prevent aggression against South Vietnam *without invading North Vietnam*, for fear of risking a wider war) were essentially unachievable – as long as North Vietnam existed, they would continue to act against South Vietnam. This served to obviate the many short-term goals the U.S. Forces Faction continuously achieved, such as repeated successes on the battlefield.
>
> The VICTORY CONDITIONS North Vietnam set for itself (unification with South Vietnam, under communist rule, by force if necessary) were focused, finite, and definitive. Unencumbered by short-term distractions, they ultimately achieved their desired end state.

4.1.1 Patron Decks: A "Patron Deck" is all the cards representing all the Assets a Patron can make available to their Faction during the course of the Scenario. Most Patron Assets will be

available for their Faction to purchase with Political Will from the beginning of the Scenario, but in some instances, Assets may only become available after certain Scenario-specific criteria are met.

When an Asset card is in the Patron Deck it is not yet in play, even though it is in the game; a player must first buy/deploy that Asset by depleting their store of Political Will. In this sense, a Patron Deck may be thought of as the "ready reserve" a Faction has to draw on.

4.1.2 <u>Faction Decks</u>: A "Faction Deck" is all the cards representing all the Assets a Faction's player currently has in-hand, ready for immediate use in the game. Usually any card in the player's Faction Deck may be employed at their discretion, however sometimes Scenario-specific criteria may dictate when a given Asset or type of Asset may be used or not.

Similar to a Patron Deck, holding a card in your Faction Deck does not necessarily mean it is in play, however once you have an Asset card in your Faction Deck employing it will not cost you further Political Will.

4.1.3 <u>Population Deck</u>: The "Population Deck" is all the Population Asset cards in play in the game. Not nominally controlled by any given Faction, the Population Deck represents those people "caught in the middle" of COIN operations.

The Population Deck usually includes different social groups as well as major infrastructure elements of intrinsic value to those groups or which are essential to the smooth functioning of the operating environment the Scenario is located in.

4.1.4 <u>Event Deck</u>: The "Event Deck" is a pack of cards detailing random events which every player draws from every turn. Events can be good, bad, or indeterminate, their effects can be instantaneous or persistent, and they cover the entire PMESII spectrum and other areas such as weather and terrain as well.

4.1.5 <u>IO Deck</u>: The "IO Deck" is a pack of cards, each with a number ranging from negative four to 10, which players draw from to facilitate such Information Operations as identifying adversary's Assets, protecting your own Assets, or fighting "the message war."

Patron Decks and Faction Decks: The Naxalite-Maoist Insurgency, 1967-Present

The Naxalites are far-left radicals located chiefly in south-central and eastern India born out of the splintering of more politically mainstream Indian communist parties in the mid-to-late 1960s.

While their movement fragments regularly, spawning a dizzying array of sub-groups, their insurgency has ebbed and flowed for more than four decades, steadily and persistently claiming lives almost every year since it began.

One might think India's PATRON DECK to be flush with Assets; a major world economy and regional superpower with a modern military of more than three million members, social and economic developments routinely identified as national priorities, and the Naxalites themselves almost uniformly opposed by the rest of the Indian political establishment.

In reality India's patronage of its counterinsurgency effort is constrained by a variety of factors; other security commitments draw away troops and equipment, there are many different economic and social ills India must attempt to address, and the Naxalites have shown themselves to be all but impervious to political condemnation. It is from these more limited resources the Indian Counterinsurgency Faction can draw to actively employ in their FACTION DECK.

4.2 Starting Decks

At the beginning of a Scenario each player is given a collection of Assets and a starting bank of Political Will to spend on them.

Those Assets a player "buys" into their hand to have immediately available for use once play starts by expending some or all of their initial reserve of Political Will forms their starting Faction Deck, while the Assets left over will constitute their starting Patron Deck.

Some Patron Assets have no associated Political Will cost and can be fielded (i.e. brought

into a player's Faction Deck) for free. Most Scenarios set limits on how many "free" Assets a player may bring into their Faction Deck before play starts or on a given turn.

Once a player's starting Faction Deck has been established they then calculate and collect their beginning number of IO cards by tallying all their starting Faction Assets, taking into account any special modifiers noted in any Asset cards' comment fields, and collecting that number of IO cards. For instance, if a player had 10 Asset cards in their starting Faction Deck and there were no IO modifiers in any of the cards' comments fields, that player would collect 10 IO cards to begin with.

In most Scenarios there is a Faction designated to go first and initiate game play (if not then a simple die role or other mutually acceptable method can be used); *only the Faction initiating game play is allowed their full IO allotment when getting set-up* while all other player Factions receive half, rounded down, of what would be their expected number of IO cards to begin play with.

This accounts for the normal game play situation of a player beginning a new turn in a new season replenishing their IO Deck while all other players, who have already had a turn to act in the current or previous season, usually will have expended some or all of their own IO Decks; once the Faction which initiates game play ends their turn, the next Faction will discard what IO cards they may have remaining and replenish their own IO Deck, and so on (see section **5.0 The Turn Cycle** for more).

The contents of Population Decks, Event Decks, and IO Decks should all be dictated by Scenario-specific set-up rules and as such should not require input from the players before game play commences.

4.3 Placement of Pieces

Once all player and non-player Faction Assets have been determined they can be placed on or around the Game Board and play can commence.

The Asset cards from the Population Deck are arranged on the Game Board in accordance with the specific situation being simulated in the Scenario being played.

Figure 4. Examples (top to bottom) of the fronts and backs of Patron/Faction Asset, Population Asset, Event, and IO cards.

Each player places their Patron Deck in front of them and holds their Faction Deck in their hand.

The Event Deck and the IO Deck are placed so they are accessible to all players and dice

are kept handy.

     While only one Mission Results Table is necessary to play SMITE, participants are encouraged to make copies so that all players may have one to refer to.
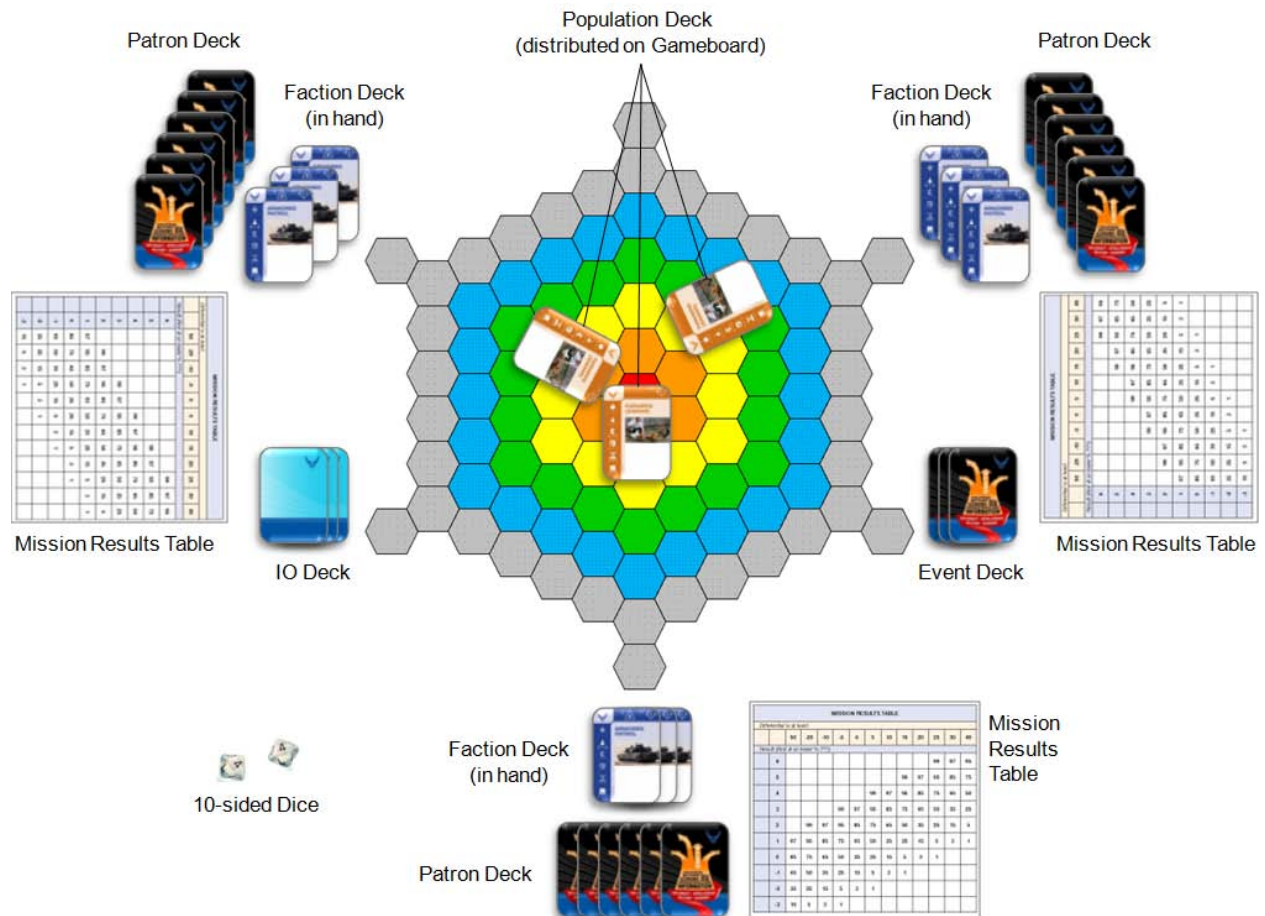
Figure 5. Notional example of a three-player Scenario set-up prior to commencement of play.

5.0 The Turn Cycle

     A player Faction's turn is their opportunity to take the initiative and engage Population Assets or Assets owned or controlled by other player Factions or modify their own Assets in pursuit of their short- and long-term goals as they seek to achieve their Victory Conditions for the Scenario.

     A player Faction's Turn Cycle consists of the following steps:

1.   Determine the Season and note any relevant effects;
2.   Discard any unused IO cards from the previous Season (except game play initiator);
3.   Calculate and draw the number of IO cards due this Season (except game play initiator);
4.   Draw an Event card and note any relevant effects;
5.   Calculate currently available Political Will;
6.   Purchase Faction Assets for use next Season;
7.   Conduct and evaluate this Season's Offensive Missions;

8. End of Faction's turn/end of a Season.

5.1 Determine Seasonal Effects

Depending on a Scenario's location the Season's weather trends may affect a Faction's ability to act by modifying such things as the number of Missions allowed, Assets' PMESII ratings, and so on.

For example a temperate climate may see winter snowfall, spring and fall rainstorms, and summertime high heat, etc.

5.2 Discard Previous IO Cards (except game play initiator)

To represent the perishable nature of information and intelligence, at the beginning of each Faction's turn they discard any remaining IO cards they may have held over from their last turn the previous season.

On a Scenario's first turn this is obviously impractical for the Faction which initiates game play as there were no previous turns in which to have drawn and expended any IO cards in the first place (note that a Faction being "game play initiator" is not a status that carries throughout the game; after the first turn they discard any remaining IO cards upon start of a new turn like any other Faction).

Discarded IO cards can be stacked off to the side, to be reshuffled once the current IO Deck is fully depleted. Be sure not to confuse the "current" IO Deck with the "discard" IO Deck.

5.3 Draw Current IO Cards (except game play initiator)

Calculating the number of IO cards due a Faction is done by taking the number of Assets currently in a player's Faction Deck and drawing that number of IO cards, also taking into account any IO modifiers (positive or negative) noted in any of their Asset cards' comment fields. Any asset providing the opportunity for more than one IO card may only provide those cards if they are committed at this point for the players turn, rather than being available for IO missions later in the turn.

On a Scenario's first turn the Faction which initiates game play simply utilizes their starting IO Deck.

Note that IO cards are kept face down when first drawn and are not looked at until after they have been played (see section **6.2 Mission Sequences** for more).

5.4 Draw Event Card

Draw a single card from the Event Deck and determine the nature of the effect(s), to whom or what they apply, their persistence or duration, and anything else as noted in the Event.

Event cards not immediately played or discarded are held in a player's hand along with their Faction Deck's Asset cards.

Discarded Event cards can be stacked off to the side, to be reshuffled once the current Event Deck is depleted. Be sure not to confuse the "current" Event Deck with the "discard" Event Deck.

5.5 Calculate Political Will

      Factions should keep a running tally of their Patron's Political Will from Scenario set-up through every turn they remain active in the Scenario, tracking Political Will gains and losses, primarily as a result of Missions being run by or against a Faction, but also as modified by Event cards and as affected by moving Patron Assets back and forth between their Faction Deck (see section **7.1 Political Will** for more).

5.6 Purchase Faction Assets

      A Faction may choose to expend some of their Patron's Political Will to deploy Patron Assets into their Scenario's theater of operations (i.e. bring them into the Faction Deck, where they will be available for use in Game play).

      Assets purchased one turn are not available for use until the Faction's following turn in the next Season and have no effect on the game (aside from costing the purchasing Faction some Political Will) on the turn they are purchased.

5.7 Conduct Offensive Missions

      If a Faction has the resources and desire to conduct offensive Missions (i.e. Missions they initiate during their turn) they may now do so. The resources required to conduct a Mission vary with Mission type but typically involve at least one IO card to target the Asset they are engaging and at least one of their own Faction Assets with which to engage their target (see section **6.2 Mission Sequences** for more).

      Note that a Faction may conduct defensive Missions in response to another Faction's offensive Missions during that other Faction's turn anytime, assuming they have the resources available to do so (see section **6.4 Contesting Missions** for more).

5.8 End of Turn (End of Season)

      At the end of a Faction's turn they should double-check their Assets' locations and statuses, confirm their running Political Will tally, and take stock of their remaining resources before passing Game play off to the next player Faction.

      Once a Season has been completed (i.e. each player Faction has had one turn), all Factions should evaluate their Victory Conditions to see where they stand and if they gain any Scenario-specific bonuses or suffer any penalties before entering in to a new Season.

6.0 Mission Execution

      Whenever a player Faction acts in SMITE they are conducting a "Mission." There are four basic Mission types in SMITE and six different ways in which to execute any given Mission, one for each system in the PMESII system of systems model.

      Mission types include influencing the Population, strengthening or weakening an Asset which belongs to yours or another Faction, and performing information/intelligence operations.

      Different PMESII systems allow for different numbers of Missions per system per turn

and the total number of Missions a player is allowed to take in a single turn is also affected by their Faction Deck's makeup; random events and such can also dictate the number of Missions a Faction may attempt to execute.

6.1 Mission Types

There are four different types of Missions a Faction can conduct in SMITE, the Influence Mission, the Strengthen Mission, the Weaken Mission, and the IO Mission.

6.1.1 <u>Influence Mission</u>: Influence Missions are where a Faction targets a Population Asset with the intent of coercing or convincing that segment of the Population to move closer to accepting the targeting Faction's point of view (if not actually agreeing with it), represented on the Game Board by moving the targeted Population Asset closer to the targeting Faction's home hex (assuming the Influence Mission was successful).

6.1.2 <u>Strengthen Mission & Modifiers</u>: A Strengthen Mission can take two different forms, either upgrading an Asset's PMESII values and other ratings, or modifying an Asset's capabilities or characteristics.
A Strengthen/Upgrade Mission is when a Faction intends to directly increase an Asset's PMESII values or other ratings.
A Strengthen/Modify Mission seeks to add a Modifier Asset (which cannot perform independently but rather serve to enhance other Asset's characteristics or capabilities) to an Asset.
Note that adding a Modifier to an Asset only requires a Strengthen Mission when the Asset to be modified is already in the field (i.e. in play, committed to a Mission); if a Faction holds both an Asset and a Modifier they wish to attach to said Asset in their Faction Deck (i.e. "in garrison," where there presumably is time for familiarization training, etc.), they may simply deploy both Asset and Modifier together.

6.1.3 <u>Weaken Mission</u>: Weakening Missions are when a Faction intends to reduce a targeted Asset's PMESII values or other ratings, trying to render said Asset ineffective, possibly forcing its temporary removal from play pending reconstitution, or even destroying it outright.

6.1.4 <u>IO Mission</u>: IO Missions are where a Faction attempts to acquire, defend, or otherwise manipulate information or intelligence with options such as revealing a targeted Asset's capabilities, to discovering hitherto unknown Faction or Population assets (see **Appendix B –** Advanced Rules for more), to directly attacking a Faction's Patron's Political Will.
Note there are some IO functions which, while technically IO Missions, are performed in support of other Faction actions and as such are not considered standalone "IO Missions" *per se*.

6.2 Mission C2

A Faction's ability to command and control Missions during its turn is limited by two factors, the latency of the PMESII system which a Mission is framed in, and the Faction's C4ISR Rating.

6.2.1 <u>PMESII Latency</u>: Many systems within the PMESII system of systems model are sufficiently broad and abstract that it is very difficult to affect quick results in them and there is considerable latency before sustained investments of time, energy, and resources can be seen to yield measurable effects. This systemic tendency towards slow change, coupled with the relatively short period of time (three months) that a turn in SMITE compromises, is abstracted by limiting the number of Missions allowed per system per turn.

PMESII Latency limitations are as follows:

Political   One Mission per turn
Military   Missions per turn limited by Faction's C4ISR Rating
Economic   One Mission per turn
Social   One Mission per turn
Infrastructure   One Mission per turn
Information   Missions per turn limited only by the size Faction's IO Deck

6.2.2 <u>C4ISR Rating</u>: Every Faction begins a Scenario with a "Headquarters" card in their Faction Deck (usually provided automatically at no cost); it is the Headquarters card which provides a Faction their C4ISR Rating.

A Faction can increase their C4ISR Rating by running a Strengthen Mission on their Headquarters.

Without a Headquarters a Faction has no C4ISR Rating, is considered unable to effectively coordinate their actions, and is limited to only defensive/reactionary Missions (i.e. a Faction cannot initiate offensive Missions during their turn) until the situation is rectified. If destroyed, a headquarters may be redeployed during the owners next turn from the Patron Deck just like any other Asset.

Also, without a Headquarters, a Faction is unable to add Modifiers to Assets, either via a Strengthen Mission or straight out of their Faction Deck; Modifiers already in play may remain so, but cannot be reassigned.

6.3 Mission Sequences

All SMITE Missions follow the same general sequence of actions and while most of those actions hold true for all Mission Types, where there are exceptions specific to a given Mission Type or if a given Mission Type requires amplifying information, that is noted after the general action description.

The Mission Sequences of actions is as follows:

1. Select the nature of the Mission to execute;
2. Select the Asset to be targeted by the Mission;
3. Decide what Faction Assets to commit to the Mission;
4. Decide how many IO cards to commit to the Mission;
5. Give other player Factions a final chance for input into the Mission;
6. Calculate the Mission Engagement Ratings;
7. Calculate the Mission values;

8. Roll on the Mission Results Table to determine Mission success or failure.

6.3.1 <u>Select Missions</u>: The acting Faction must decide and declare what type of Mission(s) they are choosing to execute during their turn (Influence, Strengthen, Weaken, or IO). They must also at this point decide on and declare what nature of effect they wish to attempt to achieve in a given Mission; choices again are Political, Military, Economic, Social, Infrastructural, or Information-based (this helps determine what Faction Assets are suited for use in the planned Missions).

The above holds true for all Mission Types.

6.3.2 <u>Select Targets</u>: The acting Faction must determine and declare what Assets they are targeting for what effect in each Mission they are planning for their turn. Targeted Assets' PMESII ratings give an indication of their strengths and weaknesses and help determine what types of Missions can be most productive for the Acting Faction.

The above holds true for all Mission Types.

6.3.3 <u>Commit Assets</u>: The acting Faction must declare which of their Faction Assets they will commit to which Missions; at least one Faction Asset must be committed to each Mission.

Depending on the nature of the Mission, a Faction may also wish to consider committing "bodyguard" Assets with strong PMESII values (usually Military) other than those necessary for Mission execution to deter or defend against other Factions contesting their Mission (see section **6.4 Contesting Missions** for more).

If they so desire, other Factions may commit supporting Assets to the acting Faction's Missions. Bear in mind that such support must be coordinated and consensual (a simple verbal or written agreement between Faction players suffices) otherwise outside contributions are instead considered contesting missions (see section **6.4 Contesting Missions** for more); even though different Factions may be working towards similar goals, if they wind-up working independent of one another they are effectively competing with one another.

While the above holds true for all Mission Types, in the case of a Strengthen/Upgrade Mission the Asset that gets committed is the increased-strength Asset which represents the Asset upgrade the acting Faction is attempting to bring about.

In the case of a Strengthen/Modify Mission, the Asset that gets committed to the Mission is the Modifier sought to be added to the fielded Asset.

6.3.4 <u>Commit/Corroborate IO</u>: The acting Faction must

Asymmetric Engagement: The Christian Knights of the KKK, 1985-1998

The Ku Klux Klan (KKK) is a white supremacist organization active throughout North America. Founded in 1865 as a single, monolithic organization, it has morphed over the years into a loose confederation of independent subgroups.

The Christian Knights of the Ku Klux Klan was formed as one such group in North Carolina in 1985, conducting what amounted to a low-level insurgency against the region's governing institutions and minority communities.

Engagement Ratings: The Second Boer War, 1899-1902

The Second Boer War was an uprising by settlers of Dutch descent against the British Empire in southern Africa begun in the late 19th century.

The first year of the war was fairly conventional and symmetrical, with the Boers winning a few initial victories in the field against the British before increasing British numbers began to turn the tide, forcing the Boers to abandon the symmetrical formation-against-formation fight and begin using asymmetric hit-and-run tactics.

Once the Boers began practicing guerilla warfare, the British were unable to regularly meet or exceed Boer Military Asset ENGAGEMENT RATINGS and so the war dragged-on for another two years, turning into the longest and costliest of Britain's "imperial wars" in the 100 years preceding World War I.

While the British knew what areas the Boers were basing out of and were able to put large numbers of troops in the field, they lacked sufficient information (about the Boers, about the terrain, about the climate, about their own logistical needs, etc.) to be able to find and fix Boer *kommandoes* in order to bring them to battle and defeat them militarily.

The British ultimately broke the Boer resistance by strategic asymmetric engagement, practicing scorched earth tactics against the farmlands upon which the *kommandoes* subsided and employing forced resettlement policies with the Boer civilian population in which they resided.

now choose how many IO cards they wish to commit to each Mission to try and ensure engagement by their committed Faction Assets with the Assets they have targeted.

IO cards are committed face-down and are not revealed until after the Commitment Deadline (q.v.), so the acting Faction is faced with some degree of uncertainty as they plan their Missions whether or not they have sufficient IO values to engage their targets successfully; this calculated uncertainty represents the real-world difficulties faced when trying to determine whether or not the intelligence gathered on a target is of sufficient quality, quantity, reliability and currency to proceed with.

One way to try and achieve a sufficient IO value that ensures target engagement is to commit several IO cards, the idea being that more IO cards means more IO values to add-up, ideally meeting or exceeding the targeted Asset's Engagement Rating. While this certainly is a legitimate tactic it is still no guarantee and can also be resource intensive if a Faction is carelessly profligate, leaving them with little or no IO to defend themselves with during other Factions' turns afterwards.

Another way to ensure sufficient IO values is to Corroborate your information. Corroboration in SMITE consists of the acting faction discarding one IO card from their IO Deck for the opportunity to reveal one committed IO card ahead of the Commitment Deadline and compare it to its Mission's targeted Asset's Engagement Rating. There is no limit to the amount of Corroboration a Faction may engage in, aside from the number of IO cards available to them for their turn with which to do so.

Similar to Asset commitment, outside Factions may also contribute supporting IO cards to the acting Faction's efforts if they wish; again, this support must be coordinated and consensual. Unlike Asset commitment, if it is not then supporting IO contributions are denied; they do not turn into competing IO missions (you cannot force someone to listen to information they do not want to hear).

Supporting IO contributions may also be used for Corroboration purposes. If a supporting Faction is Corroborating their own IO contribution, they proceed normally (i.e. one IO discard in exchange for revealing one committed IO card).

If a supporting Faction seeks to Corroborate another Faction's IO commitment, whether the acting Faction's or another supporting Faction's, then, after the Corroborating Faction discards their one IO card Corroboration "fee" but, *before the committed IO card that is being Corroborated is revealed,* the Faction who committed the IO card about to be Corroborated must guess whether the number on the IO card is odd or even.

If they guess correctly, the IO value of that card may be added to the IO tally when calculating Mission Engagement. If they guess incorrectly, then the Corroborated IO card is discarded and its value is not considered for Mission Engagement; this calculated uncertainty represents the real-world situation that even the closest of allies do not share everything and there is always the possibility of sharing information that is considered redundant, discredited, outdated, or what have you by those with whom it is shared.

Just as with contributing IO support, contributing IO Corroboration must be coordinated and consensual between Factions, otherwise it is not allowed.

The above holds true for Influence, IO and Weaken Mission Types only.

In the case of either type of Strengthen Mission, the IO commitment represents the communications necessary for coordinating and conducting training. Committed IO, Corroborated or not, is doubled in this case as it directed towards a supposedly receptive audience (negative IO values are halved, rounded towards zero; that is, a -3, halved becomes a

-1.5, is rounded to -1. Similarly, a -1, halved to -0.5, is rounded to zero).

6.3.5 Commitment Deadline: Once the acting Faction is satisfied with their Asset and IO commitments they may proceed to resolve their turn's Missions.

At this point the acting Faction must give all other player Factions a final opportunity to decide if they intend to contest or contribute to any Missions if they haven't yet voiced intentions to do so; supporting contributions and contesting commitments cannot be made after this point in Mission Execution.

Any supporting contributions made now are collated accordingly (i.e. Assets placed with Assets, IO cards with IO cards).

If no other Faction chooses to contest any Missions, Mission resolution then proceeds apace. If one or more Factions do contest one or more missions, see section **6.4 Contesting Missions** for more.

The above holds true for all Mission Types.

6.3.6 Mission Engagement: Now the acting Faction determines if they have successfully engaged the Assets they have targeted; in lieu of Corroborated information this is done by revealing the committed IO cards for each Mission and tallying the resultant numbers and then comparing those Mission tallies to their Missions' targeted Assets' Engagement Ratings.

If the acting Faction's IO tally for a given Mission (plus any supporting IO) is equal to or greater than that Mission's targeted Asset's Engagement Rating, they have successfully engaged and may proceed with that Mission.

If the acting Faction's IO tally for a given Mission (plus any supporting IO) is less than that Mission's targeted Asset's Engagement Rating, they have failed to engage and the Mission ends, though any committed Assets remain committed until next season and any committed IO cards remain expended and are discarded.

The above holds true for all Mission Types.

6.3.7 Mission Values: The acting Faction then determines their Mission Value by tallying the relevant PMESII values (i.e. if conducting an Economic Influence Mission, an Asset's Economic value is relevant) of their committed Assets', to include supporting contributions, comparing that number to their targeted Assets' relevant PMESII value tally, and then subtracting the latter from the former.

IO commitments (again, including supporting contributions) are likewise tallied and subtracted, though in this case the targeted Asset's Engagement Rating is also subtracted from the acting Faction's IO tally.

The acting Faction's net Asset value is then combined with their net IO value, giving them their overall Mission Value.

The above holds true for Influence, IO and Weaken Mission Types only.
In the case of Strengthen Mission, only IO values are tallied and compared.

6.3.8 Mission Results: The acting Faction then takes their Mission Value and rolls against it on the Mission Results Table (see section **6.5 Mission Results Table** for more).

The above holds true for all Mission Types.

6.4 Contesting Missions

Works like normal missions; contesting commitments may themselves be contested (this represents a minor engagement ballooning into a major battle, as both sides continuously feed resources into the battle); contesting missions get resolved from last (last contesting commitment) to first (initial/original mission). Both offensive and defensive IO cards are tallied separately. Otherwise it set aside for the next step

6.4.2 <u>Spinning Mission Results</u>: After a Mission has been resolved and the resultant Political Will assessed, involved Factions have the option to try and spin how Mission Results are perceived in the infosphere (impacting Political Will) by either reducing, or increasing its perceived impact.

As soon as a Mission has been resolved, each faction may immediately (he who spins first, spins loudest) commit only one more IO card, with no Corroboration allowed, and then find the new Political Will result.

Spin is propaganda, not traditional intelligence work, but that intelligence work assists the spinners in understanding their target audience.

6.4.3 <u>Counterattacks and Ambushes</u>: Counterattacks and Ambushes are two related concepts, both involving a change in initiative, both involving some element of surprise, both involving a tangential relationship to Contesting Missions, and so are covered here together.

The results of Counterattacks and Ambushes may be contested, just like those of any other Missions.

Counterattacks are special opportunities that allow a Faction to conduct an Offensive Mission on a turn other than their own, against the Faction whose turn it currently is.

If an acting Faction's attempted Mission fails to successfully engage its targeted Asset, those Assets committed by the acting Faction are left exposed to Counterattack by the originally targeted Faction. Factions not originally targeted in the failed Mission may not counterattack the exposed Assets, only the originally targeted Faction may choose to counterattack.

A Counterattack is conducted like any other Mission, with the exceptions that it must be symmetrical (i.e. if the Counterattack is in response to a failed Political Mission, then the Counterattack must be Political in nature as well) and other Factions cannot contribute Assets (they may contribute IO). Counterattacks do not count against a Faction's PMESII Latency limitations; for instance, if the Counterattack is of a Military nature it does not count against the Counterattacking Faction's C4ISR rating.

Note that a failed Counterattack then leaves the Counterattacking Faction's Assets exposed to a counter-Counterattack, and so on, *ad infinitum*, as the initiative seesaws back-and-forth between the competing Factions in such a case.

Ambushes are attacks which cannot be contested, or which cannot be withdrawn from, or both, and are only enabled by Event card; they are not situations that may be brought about in a controlled manner by a Faction.

This deliberate randomness is to represent the real-world situation where *tactical* ambushes of relatively small-scale and comparatively short-duration can take place on a daily basis, but to lay a trap that can truly box-in an adversary at the *operational* level for the better

part of a three-month period depends as much on good luck as it does on great planning.

6.5 Mission Results Table

The Mission Results Table (MRT) is where potential outcomes are tabulated when finalizing the calculation of a mission result from the table in Figure 7 the engagement result, as described in Factional Turn Cycle – Mission Mechanics. As stated prior, in Mission Mechanics, the difference between the IO is a number that when traversing (laterally) the Range you will find the correct column grouping. A random number generator that generates a number from 0 to 9 is then produced. That number, based on the Range column (longitudinally), defines both the Political Will gain or loss and the bonus based on mission type.

Players will note that good or bad Intel (as represented by the IO cards) will have major impacts on the outcome of any mission, as will the impact of specific junior officers, NCOs, heroes, villains, random civilians, and generically Murphy's Law (die rolls).

SMITE Mission Results Tables (MRT)													
	MISSION TYPE				RANGE								
Political Will Points Gained/Lost	Influence Mission	Strengthening Mission	Weakening Mission	-12 to -10	-9 to -7	-6 to -4	-3 to -1	0 to 2	3 to 5	6 to 8	9 to 11	12 to 14	15 & above
	(current)												
													9
												9	8
	10	3	3								9	8	7
3	9	3	3							9	8	7	6
	8	2	2						9	8	7	6	5
	7	2	2					9	8	7	6	5	4
2	6	2	2				9	8	7	6	5	4	3
	5	1	1			9	8	7	6	5	4	3	2
	4	1	1		9	8	7	6	5	4	3	2	1
1	3	1	1	9	8	7	6	5	4	3	2	1	0
	2	1	1	8	7	6	5	4	3	2	1	0	
	1	1	1	7	6	5	4	3	2	1	0		
0	0	0	0	6	5	4	3	2	1	0			
	-1	0	0	5	4	3	2	1	0				
	-2	0	0	4	3	2	1	0					
-1	-3	0	0	3	2	1	0						
	-4	0	0	2	1	0							
	-5	0	0	1	0								
-2	-6	0	0	0									

Figure 6. SMITE's Mission Results Table (MRT).

6.5.1 <u>Mission Evaluation</u>: Both offensive and defensive IO cards are tallied separately. If there are competing Factions this total is ranked to see who will take the lead and consequently gain or lose the most from the engagement. Otherwise it set aside for the next step.

These summations of the IO totals are subtracted and the result, which can be a negative number, falls within the **Range** within one of the columns on the Mission Results Table.

Then roll a ten sided die to find out which row to view. For those who do not have access to a ten sided die a standard six sided die may be substituted, but one (1) must be added to the result before proceeding.

Once the correct row is identified, slide across to the mission type column, i.e., Influence, Strengthen, Weaken in order to see the results.

Note, if there are secondary missions both offensive and defensive mission sub-category's types are tallied separately and follow the above rules for evaluation prior to evaluation of the

primary mission. The benefit here is that a Faction can gain or lose Political Will and lose assets due to elimination (weakening mission).

7.0 The Will to Win

7.1 Political Will

Political Will represents the willingness of a faction's primary supporter to supply the blood and treasure necessary to continue to prosecute an insurgency. Once a Patrons Will fails, the end is often quick unless the currently controlled population assets are capable of finishing off the war.

      7.1.1 <u>Forced Withdrawal</u> If a Patrons Political Will drops below ZERO, the following occurs:
      A] The Patrons Will no longer exists.
      B] The Patron Deck is removed from the game.
      C] Two Patron assets (not Population assets controlled) in play must be removed each turn until there are no remaining Patron Assets in play.

      7.1.2 <u>Tactical Withdrawal/Rectifying Overcommitment</u>: Assets in the Faction deck may be withdrawn into the Patron deck, and allow the recovery of half the Political Will (rounded down) for their purchase.

7.2 Victory in a Scenario

Victory Conditions will vary by scenario and Patron within the scenario. By perusing the victory conditions in **9.0 Introductory Scenario: The Philippine War, 1899 – 1902**, the reader can see that victory conditions do not need to be mutually exclusive or even zero sum. Some victory conditions may require a different player to also achieve some level of victory.

It is recommended for US victory conditions that that a certain level of Population assets is in the upper stability region of the US or its allies, and at least "X" points of those are in each one of the PMESII categories. This would represent a reasonably stable, fully functional nation in being. Other restrictions may also be applied.

Other player factions will mostly being trying to establish governments in their own image, so similar requirements may be applied. However some Patrons will want chaos to ensue so they have the "justification" to move in (militarily most commonly) and re-establish order. So those Patrons will be trying to minimize any semblance of governance and that should be worked into their victory conditions.

8.0 Advanced Rules

These are concepts we have not **yet** been able to imbed within the pen and pencil version of

SMITE. Ideas, suggestions and constructive comments are always welcome.

Collateral damage: Too much force with poor intelligence backfires and influences the Population.

Secondary Effects: When asset A is impacted by a mission, asset B is also.

Mission Target Stability: Certain Assets capability vary with their targets' differing levels of stability: police with batons and horses do poorly in Combat, but very well in Rule of Law.

Faction Stability: the more stable a faction is, the better its self-protection.

9.0 Introductory Scenario: The Philippine War, 1899 – 1902

Philippine War (1899-1902) Scenario Sketch

This scenario overemphasizes the impact of three of the Patrons; the Europeans (who wanted the US to fail so they could step in), the East Asian Interests (who were not pleased to see the US setting up shop next door), and the Holy See (the Vatican, who had millions of Catholics on the islands and wouldn't have minded converting the Muslims of the Sulu Sultanate). Each player has two quasi allies who have conflicting interests, which will make it hard for the player to appease both allies at the same time. This concept should be applied to most scenario designs where players have reasons to help each other, but also have competing interests as well.

Included:

Population Cards & Turn 0 Set-up
American Administration Faction Cards, Modifier Cards, Set-up, and Victory Conditions
Philippine Insurrectionists Faction Cards, Modifier Cards, Set-up, and Victory Conditions
Sultanate of Sulu Faction Cards, Modifier Cards, Set-up, and Victory Conditions
Holy See Interests Faction Cards, Modifier Cards, Set-up, and Victory Conditions
East Asian Interests Faction Cards, Modifier Cards, Set-up, and Victory Conditions
European Interests Faction Cards, Modifier Cards, Set-up, and Victory Conditions

Abbreviations
P   Political Rating
M   Military Rating
E   Economic Rating
S   Social Rating
IOC   IO Cards Generated, only listed if other than one (1)
PW   Political Will
C2   Command and Control Raring
ER   Engagement Rating

Patron Corners in Clockwise order of play (next player is to the left of the previous player):
American Administration
Holy See Interests
European Interests
Philippine Insurrectionists
East Asian Interests

Sultanate of Sulu

Notes: {} indicate the graphic descriptor rather than being part of the title
[General] indicates the following cards have these attributes unless specifically modified.
"???" quotes indicate a ring level, "+" means "or higher level of governance."
* = an island may be considered "secured" when two or more of its population assets are in the "stability" ring or better of the American Administration, Sulu Sultanate, or Holy See board wedge **and** all Bandits are either zero strength or anywhere in the American Administration, Sulu Sultanate, or Holy See board wedges

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POPULATION
Cards: Start in Combat, unless otherwise noted.
Road Net (Luzon, Infrastructure) E+1, C2 +1
Upgrades to Road & Rail Net, E+3, C2 +3, PW3
Telegraph (Luzon, Infrastructure) S+2, I+3, PW1, C2 [Mil]+2 or any other +1
Farmers [General] P1, M1, E4, S7, I1, I2, ER1
Fishermen [General] P1, M0, E4, S7, I0, I1, ER2; control grants ability to transit associated sea zones (smuggling/infiltration); At start of AA turn, if asset is denied sea access, shift 1 towards Combat and check each island asset to do the same on a die roll of 1-4
Merchants [General] P3, M0, E7, S5, I2, I3, ER0
Local Government [General] P5, M0, E3, S6, I4, I3, ER-1; On each AA turn that this asset is higher than any of the islands Farmers, Fishermen, or Merchants, shift this asset one step towards Combat
Bandits [General] P0, M3, E0, S0, I0, I1 ER 4; Start in Insurgent Stability
Church Lands [Infrastructure] if brought to "Rule of Man+" in a faction's control arc, lands may be redistributed during the Patron Will Phase of a Players Turn
If church lands are redistributed, redistributing faction gains influence shift of 3 for local farmers {Shift must be <u>away</u> from "Rule of Law+"}
Ports [Infrastructure] Economic +3 Fishermen, +2 Merchants, +1 Farmers; +2I for Smuggling Missions
Control of a port at "Economy+" grants you "presence" in the island's associated sea zones
"Presence" in a sea zone allows transit of assets between the associated islands
Minor Ports support one Military Patrol
Port of Manila (Luzon) supports two Military Patrols, Starts in AA "Middle Class".
Minor Ports (Palawan) [Puerto Princesa]
Minor Ports (Mindoro) [Calapan]
Minor Ports (Samar) [Calbayon]
Minor Ports (Leyte) [Tacloban]
Port of Davao (Mindanao) supports two Military Patrols, Start in Sulu Sultanate "Middle Class"
Minor Ports (Panay) [Roxas]
Minor Ports (Negros) [Cadiz]

Control of a sea zone (i.e. having the sole military asset(s) in said zone) allows you to block others' transit

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AMERICAN ADMINISTRATION (AA)

Faction Cards: Start in Patron Corner when deployed, unless otherwise noted.

Headquarters +1 mission each type

U.S. Artillery (high collateral damage risk, M is 1-2 when alone)

U.S. Army,

U.S. Marines,

U.S. Volunteers, (Costs 1 PW each Winter – not home by Christmas)

Philippine Scouts *(can only be deployed if at least one island is secured*)*;

Philippine Constabulary *(can only be deployed if Luzon is secured*)*;

U.S. Navy patrol; (May only engage Fishermen or Ports) (high collateral damage risk) No C2 cost when employed with US Marines +3M

Naval Transports; Allows unlimited unit transit when stacked with a Major port

Civil Administrators;
Civil Engineers
Department of State; (Intel rating only useable versus Patron PW)

Modifier Cards:
Local Interpreters
SCHOOLS [General] S +3, P +2, E +1 available to all local population.
S +2, P +1 available to Patron assets.
School must be Stability+.
Successful strengthen infrastructure mission versus Port Infrastructure may build a SCHOOL. Note that the SCHOOL Engagement Rating (7) is only required for the first successful strengthen infrastructure mission (You must figure out that SCHOOLS are a GOOD IDEA). Following school building missions require an ER of "1" (Don't put them in flood zones.) Holy See and Sulu Sultanate may co-opt this card by building it first on Church Lands Infrastructure they control at "Stability+".

Starting PW = 10
+2 PW for each island declared secured.
+1 PW for each Infrastructure reaching the outer ring (Democracy) in AA wedge,
-1 PW for each failed military defense on secured islands.
+/-1 PW for each Military success/disaster (+/-3 result)
+/-1 PW for each Non-Military clear success/disaster (+/-6 result)
Am Admin gains 5 PW if it successfully engages (ER success) any East Asian (Yellow Peril!) or European Interests assets (Interfering Foreigners!).
Am Admin gains 10 PW if it successfully engages (ER success) any East Asian Interests assets with a non-zero Military rating. (The US mobilizes for punitive action). This is only 5PW if East Asian "Yellow Peril!" has already occurred.
Turn 8: US presidential elections; Luzon and three other islands must be declared secure or a new administration takes office (-12PW)
Turn 16: US congressional elections; Six islands must be declared secure, and four must have functioning schools and 4 functioning ports or else the new congress will be cranky (-6PW)
Turn 24: US presidential elections; if all 8 islands are not declared secured with at least 6 functioning Schools and 6 functioning ports, both presidential candidates run on the promise to withdraw from the quagmire. (-20 PW)

Victory Conditions
Major Victory: at the start of any turn prior to turn 24 the AA meets the requirements of Turn 24 above.
Minor Victory: at the start turn 24 the AA meets the requirements of Turn 24 above
Draw: Avoid Insurrectionist having Luzon (or any 2 other islands) "secure" by Turn 32.
*****

PHILIPPINE INSURRECTIONISTS (PI)
Faction Cards: Start in Patron Corner when deployed, unless otherwise noted.
Headquarters C2 +1 mission any type
Regulars

Irregulars
Shadow Party
Principles
International Contacts

Modifier Cards:
European Press Correspondent (IW missions versus with European, Holy See and AA PW)
East Asian Press Correspondent (IW missions versus with East Asian, Sulu Sultanate and AA PW)

Starting PW = 6
-1 PW for each island declared secured.
+2 PW for each successful military attack on "secured" islands.
-1 PW for each Military disaster (-3 result)
+2 PW for each Military success (+3 result)
+1 PW for each church lands redistributed,
Turn 8: US presidential elections; Luzon and three other islands must be declared secure (-4PW) or a new administration takes office (+8PW)
Turn 16: US congressional elections; Six islands must be declared secure, and four must have functioning schools and 4 functioning ports (-2PW) or else the new congress will be cranky (+4PW)
Turn 24: US presidential elections; if all 8 islands are not declared secured with at least 6 functioning Schools and 6 functioning ports (-10PW), both presidential candidates run on the promise to withdraw from the quagmire. (+10 PW)

Victory Conditions
Major: US has no victory and Luzon plus 2 other islands are "secure" (AA units count as bandits)
Minor: US has no victory and Luzon (or any 2 other islands) are "secure" (AA units count as bandits)
Draw: US has no victory and either European Interests or East Asian Interests control population assets
Loss: Any other condition
*****

SULTANATE OF SULU (Sulu)
Faction Cards: Start in Patron Corner when deployed, unless otherwise noted.
Sultans Palace, C2 +1 mission any type
Irregulars [General]
Religious Leader

Modifier Cards:
Fatwa +3S, +1P, PW3 (requires a non-AA, non-Sulu controlled asset in Mindanao at the moment played)

Starting PW=7

+1 PW for each non-Mindanao island secured (+2PW for Luzon)
-1 PW for each failed military defense on secured islands.
+1 PW School (Mindanao) in Sulu Wedge
+1 PW Full Control of Port (Mindanao)

Victory Conditions
Major Victory: Everything that belongs on your island is in your wedge (beyond your faction assets, this includes Abandoned Spanish Military [ASM] (Mindanao), Port of Davao, Church Lands (Mindanao), Schools (Mindanao) and five Population assets – although the Bandits and ASM may have been removed).   The Insurgents lose. The AA has granted you special considerations for Allying with them on the first turn. You have allowed the AA the use of your controlled Infrastructure whenever asked and declared that Mindanao is secured by the AA (Alliance is intact).
Minor Victory: Everything that started in your wedge is still there. You backstab the US (no access to Infrastructure or rescind declaration that Mindanao is secured by the AA) to insure an East Asian Interests victory. No one else has a major Victory.
Loss: The AA loses, and you have been reduced. OR The Insurgent wins.
*****

HOLY SEE INTERESTS (HS)
Faction Cards: Start in Patron Corner when deployed, unless otherwise noted.
Arch Bishop C2 +1 mission
Bishop
Priest
Priest Agents
Abandoned Spanish Military (Mindanao) (deploys ROL, Holy See) May not be strengthened or rebuilt. Discard (return to Spain) for PW gain
Missionaries

Modifier Cards:
Papal Bull P+2, S+4, PW0 Only available after the first Church lands is Redistributed.

Starting PW = 3
Spend 3PW on Redistributed Church Lands in ROL+ and in European, American or Holy See control to return those lands into their original condition. East Asian Interests gain a Farmer influence shift of 2.
Each School built on Church Lands +2 PW
Church Lands (Mindanao) is in Holy See wedge and "Stability+" (+6PW)
Each time a Church Lands rises to ROL in an EI, HS, or AA wedge (+1PW)
Each time a Church Lands rises to "Stability+" in an EI, HS, or AA wedge (+1PW)
Each time a Church Lands reaches the HS wedge (+1PW)

Victory Conditions
Major Victory: No population cards outside of Mindanao are at "Security-". All 8 Church Lands are in European, American or Holy See control at "ROL+" OR 7 Church Lands are under Holy See control at Stability +. May substitute 2 Schools for one Church Lands (or 4 for 2)

Minor Victory: No population cards outside of Mindanao are at "Combat". Seven Church Lands are in European, American or Holy See control at "Stability+". May substitute 2 Schools for one Church Lands (or 4 for 2)
Draw: No Church Lands are currently "Redistributed".
Loss: Anything else
*****

EAST ASIAN INTERESTS (EAI)
Faction Cards: Start in Patron Corner when deployed, unless otherwise noted.
EmbassyC2 +1 mission; -1PW to commit to any action
East Asian Diplomats
East Asian [General] Requires successful smuggling operation or 2 PW is lost
East Asian Volunteers

Modifier Cards: Requires successful smuggling operation or 2 PW is lost
East Asian Arms +1M (No machine guns included) Playable only on Insurgent or Population Assets, PW 1
East Asian Currencies One PW cost = 2 Insurgent or Sulu PW

Starting PW=4
+4 PW if Sulu abandons US alliance
+1 PW each time a population asset finishes an influence movement in "Combat"
-1 PW each time a population asset enters someone else's corner
+3PW for each Church Lands Redistributed
+1 PW for each successful military attack on "secured" islands.

Victory Conditions
Major: US fails Turn 24 election conditions, EAI controls at least one population asset, Sulu has a victory and Holy See does not.
Minor: US fails Turn 24 election conditions, at least one population asset is in EAI wedge.
Draw: Sulu has a victory and Holy See does not.
*****

EUROPEAN INTERESTS (EI)
Faction Cards: Start in Patron Corner when deployed, unless otherwise noted.
Embassy C2 +1 mission; -1PW to commit to action
European Diplomats

Modifier Cards: Requires successful smuggling operation or 2 PW is lost
Gentlemen Adventurer
European Arms +2M (Machine guns included),
European Currencies (One PW cost = 3 Insurgent PW, or 1 HS PW)

Starting PW=4
+1 PW each time a population asset finishes an influence movement in "Combat"

-1 PW each time a population asset enters someone else's corner
+4 PW if Sulu abandons US alliance
+1PW for each Church Lands Recovered
+1 PW for each successful military attack on "secured" islands.

Victory Conditions:
Major: US fails Turn 24 election conditions, EI controls at least one population asset, Holy See has a victory and Sulu does not.
Minor: US fails Turn 24 election conditions, at least one population asset is in EI wedge.
Draw: Holy See has a victory and Sulu does not.

*****

Smuggling/ illicit transit rules
Smuggling (other clandestine transit forms are treated here as smuggling) requires three Missions:
1] A cargo asset (that which must be delivered by smuggling prior to use) delivered to the player with the smuggling capable asset (may be the same player) ER-1 Infrastructure Mission
2] The smuggling capable asset (in owning players turn) conducts IO mission ER2 to deliver the cargo to a (potentially) third player.
For both missions use the following: MRT results of -1 thru +1 are mission abort; +2 or better is success, -2 or worse is cargo loss

9.1 Card and map definitions
POPULATION [59]

Cards: Start in Combat, unless otherwise noted.
Road Net (Luzon, Infrastructure) E+1, C2 +1
Upgrades to Road & Rail Net, E+3, C2 +3, PW3
Telegraph (Luzon, Infrastructure) S+2, I+3, PW1, C2 [Mil]+2 or any other +1
Farmers [General] P1, M1, E4, S7, I1, I2, ER1
Farmers (Luzon)
Farmers (Palawan)
Farmers (Mindanao), Start in Sulu Sultanate Stability
Farmers (Samar)
Farmers (Leyte)
Farmers (Mindoro)
Farmers (Panay)
Farmers (Negros)
Fishermen [General] P1, M0, E4, S7, I0, I1, ER2; control grants ability to transit associated sea zones (smuggling/infiltration); At start of AA turn, if asset is denied sea access, shift 1 towards Combat and check each island asset to do the same on a die 1-4
Fishermen (Luzon)
Fishermen (Palawan)
Fishermen (Mindanao), Start in Sulu Sultanate Stability
Fishermen (Samar)

Fishermen (Leyte)
Fishermen (Mindoro)
Fishermen (Panay)
Fishermen (Negros)
Merchants [General] P3, M0, E7, S5, I2, I3, ER0
Merchants (Luzon)
Merchants (Palawan)
Merchants (Mindanao), Start in Sulu Sultanate Stability
Merchants (Samar)
Merchants (Leyte)
Merchants (Mindoro)
Merchants (Panay)
Merchants (Negros)
Local Government [General] P5, M0, E3, S6, I4, I3, ER-1; On each AA turn that this asset is higher than the islands Farmers, Fishermen, or Merchants, shift this asset one step towards Combat
Local Government (Luzon)
Local Government (Palawan)
Local Government (Mindanao), Start in Sulu Sultanate Stability
Local Government (Samar)
Local Government (Leyte)
Local Government (Mindoro)
Local Government (Panay)
Local Government (Negros)
Bandits [General] P0, M3, E0, S0, I0, I1 ER 4; Start in Insurgent Stability
Bandits (Luzon)
Bandits (Palawan) M2, ER1
Bandits (Mindanao) ER2, Start in Sulu Sultanate Security
Bandits (Samar) M7, ER7, Start in Insurgent ROM
Bandits (Leyte) M6, ER6, Start in Insurgent ROM
Bandits (Mindoro)
Bandits (Panay) ER2
Bandits (Negros)
Church Lands [Infrastructure] if brought to "Rule of Man+" in a faction's control arc, lands may be redistributed during the Patron Will Phase of a Players Turn
If church lands are redistributed, redistributing faction gains influence shift of 3 for local farmers {Shift must be away from "Rule of Law+"}
Church Lands (Luzon)
Church Lands (Palawan)
Church Lands (Mindanao) Start in Sulu Sultanate "Security"
Church Lands (Samar)
Church Lands (Leyte)
Church Lands (Mindoro)
Church Lands (Panay)
Church Lands (Negros)
Ports [Infrastructure] Economic +3 Fishermen, +2 Merchants, +1 Farmers; +3I for Smuggling

Missions

Control of a port at "Economy+" grants you "presence" in the island's associated sea zones

"Presence" in a sea zone allows transit of assets between the associated islands

Successful strengthen infrastructure mission versus Port Infrastructure <u>may</u> build a SCHOOL.

Minor Ports support one Military Patrol

Port of Manila (Luzon) supports two Military Patrols Starts in AA "Middle Class",.

Minor Ports (Palawan)

Minor Ports (Mindoro) Start in Sulu Sultanate "Middle Class",

Minor Ports (Samar)

Minor Ports (Leyte)

Port of Davao (Mindanao) supports two Military Patrols

Minor Ports (Panay)

Minor Ports (Negros)

Map Pathways

South China Sea (Europe, Luzon-Palawan, Mindoro-Palawan)

Sulu Sea (Palawan-Mindanao, Palawan-Negros, Palawan-Panay)

Bohol Sea (Mindanao-Negros, Mindanao-Samar)

Visayan Sea (Leyte-Negros, Leyte-Panay, Leyte-Samar^, Negros-Panay, Negros-Samar, Panay-Samar)

Sibuyan Sea (Luzon-Mindoro, Luzon-Panay, Luzon-Samar*, Mindoro-Panay, Mindoro-Samar, Panay-Samar)

Philippine Sea (East Asia, Leyte-Samar^, Luzon-Samar*)

^,* = control of both seas required to block transit. Also ^ transit allowed without support (like Fishermen)

Control of a sea zone (i.e. having the sole military asset(s) in said zone) allows you to block others' transit

*****

AMERICAN ADMINISTRATION (AA) [37]

<u>Faction Cards</u>: Start in Patron Corner when deployed, unless otherwise noted.

Headquarters P6, M1, E3, S4, I4, I3, ER5, PW3, C2 +1 mission <u>each</u> type

U.S. Artillery P0, M8, E0, S0, I0, I0, PW3, ER0, IOC0 (high collateral damage risk, M is 1-2 when alone)

U.S. Army, P1, M7, E1, S1, I1, I2, PW2, ER4

U.S. Army, P0, M7, E1, S0, I1, I1, PW2, ER4

U.S. Army, P0, M6, E0, S0, I2, I0, PW1, ER4

U.S. Marines, P2, M9, E1, S2, I1, I3, PW1, ER5, IOC 2

U.S. Marines, P2, M8, E1, S2, I1, I3, PW0, ER5, IOC 2

U.S. Volunteers, P0, M5, E0, S0, I3, I0, PW4, ER3 (Costs 1 PW each Winter – not home by Christmas)

U.S. Volunteers, P0, M5, E0, S0, I3, I0, PW4, ER3 (Costs 1 PW each Winter – not home by Christmas)

U.S. Volunteers, P0, M5, E0, S0, I3, I0, PW4, ER3 (Costs 1 PW each Winter – not home by

Christmas)

Philippine Scouts P3, M6, E2, S3, I0, I4, PW1, ER6 *(can only be deployed if at least one island is secured*)*;

Philippine Constabulary P3, M3, E2, S6, I0, I6, PW3, ER6 *(can only be deployed if Luzon is secured*)*; IOC3

Philippine Constabulary P3, M3, E2, S6, I0, I6, PW4, ER6 *(can only be deployed if Luzon is secured*)*; IOC3

Philippine Constabulary P3, M3, E2, S6, I0, I6, PW5, ER6 *(can only be deployed if Luzon is secured*)*; IOC3

U.S. Navy Cruiser (or patrol); P2, M2, E1, S0, I1, I1, PW 2, ER9 (May only engage Fishermen or Ports) (high collateral damage risk) No C2 cost when employed with US Marines +3M

U.S. Navy Destroyer (or patrol); P1, M1, E1, S0, I1, I1, PW 1, ER8 (May only engage Fishermen or Ports) No C2 cost when employed with US Marines +2M; +5I vs. Smuggling

U.S. Navy Destroyer (or patrol); P1, M1, E1, S0, I1, I1, PW 1, ER8 (May only engage Fishermen or Ports) No C2 cost when employed with US Marines, +2M, +5I vs. Smuggling

U.S. Navy Gunboat (or patrol); P1, M0, E0, S0, I1, I1, PW 0, ER7 (May only engage Fishermen or Ports) No C2 cost when employed with US Marines, +1M, +5I vs. Smuggling

U.S. Navy Gunboat (or patrol); P1, M0, E0, S0, I1, I1, PW 0, ER7 (May only engage Fishermen or Ports) No C2 cost when employed with US Marines, +1M, +5I vs. Smuggling

U.S. Navy Gunboat (or patrol); P1, M0, E0, S0, I1, I1, PW 0, ER7 (May only engage Fishermen or Ports) No C2 cost when employed with US Marines, +1M, +5I vs. Smuggling

Naval Transports; PW 1, ER7, IOC0, Allows unlimited unit transit when stacked with a Major port

Civil Administrators; P5, M0, E3, S3, I2, I3, PW 1, ER 4

Civil Administrators; P5, M0, E3, S3, I2, I3, PW 1, ER4

Civil Engineers P0, M0, E1, S0, I5, I1, PW2, ER1

Civil Engineers P0, M0, E1, S0, I5, I1, PW2, ER1

Department of State; P7, M0, E0, S0, I0, I7, PW 1, ER7 (Intel rating only useable versus Patron PW)

Department of State; P5, M0, E0, S0, I0, I5, PW 0, ER7 (Intel rating only useable versus Patron PW)

Modifier Cards:

Local Interpreters S+2, I+2, PW0

Local Interpreters S+2, I+2, PW0

SCHOOLS [General] S +3, P +2, E +1 available to all local population.

S +2, P +1 available to Patron assets.

School must be Stability+.

Note that the SCHOOL Engagement Rating (7) is only required for the first successful strengthen infrastructure mission (You must figure out that SCHOOLS are a GOOD IDEA). Following school building missions require an ER of "1" (Don't put them in flood zones.) Holy See and Sulu Sultanate may co-opt this card by building it first on Church Lands Infrastructure they control at "Stability+".

Schools (Luzon)
Schools (Palawan)
Schools (Mindanao)
Schools (Samar)
Schools (Leyte)
Schools (Mindoro)
Schools (Panay)
Schools (Negros)

*****

PHILIPPINE INSURRECTIONISTS (PI) [16]

Faction Cards: Start in Patron Corner when deployed, unless otherwise noted.
Headquarters P4, M1, E1, S4, I1, I1, ER4, PW3, C2 +1 mission any type
Regulars (Luzon), P0, M5, E0, S0, I3, I0, ER3, PW1
Regulars (Luzon), P0, M5, E0, S0, I3, I0, ER3, PW1
Irregulars [General] P0, M3, E0, S0, I1, I1, ER 4
Irregulars (Luzon) PW0
Irregulars (Palawan) PW3
Irregulars (Mindanao) PW5
Irregulars (Samar) PW3
Irregulars (Leyte) PW3
Irregulars (Mindoro) PW3
Irregulars (Panay) PW3
Irregulars (Negros) PW3
Shadow Party P4, M0, E1, S3, I1, I2, ER6, PW1
Padrones P2, M0, E4, S6, I0, I0, ER2, PW1
International Contacts E2, I2, I2: ER5, PW4

Modifier Cards:
European Press Correspondent PW 4, IO 4 (IW missions versus with European, Holy See and AA PW)
East Asian Press Correspondent PW4, IO4 (IW missions versus with East Asian, Sulu Sultanate and AA PW)

*****

SULTANATE OF SULU (Sulu) [6]

Faction Cards: Start in Patron Corner when deployed, unless otherwise noted.
Sultans Palace P4, M1, E4, S4, I1, I1, ER3, PW3, C2 +1 mission any type
Irregulars [General] P0, E0, S0, I1, I1
Irregulars (Mindanao) M2, ER3, PW1
Irregulars (Mindanao) M3, ER4, PW2
Irregulars (Mindanao) M4, ER5, PW3

Religious Leader P3, M0, E0, S7, I2, I3, ER 2, PW4

Modifier Cards:
Fatwa +3S, +1P, PW3 (requires a non-AA, non-Sulu asset in Mindanao at the moment played)

*****

HOLY SEE INTERESTS (HS) [9]

Faction Cards: Start in Patron Corner when deployed, unless otherwise noted.
Arch Bishop P3, M0, E2, S7, I5, I4, PW3, ER4, C2 +1 mission
Bishop P1, M0, E1, S5, I3, I2, PW2, ER3
Priest P0, M0, E0, S6, I1, I2, PW1, ER1
Priest Agents P0, M0, E0, S3, I0, I4, PW1, ER4, IOC 2
Abandoned Spanish Military (Mindanao) P0, M4, E0, S-1, I0, I0, PW1, ER2, IOC0 (deploys ROL, Holy See) May not be strengthened or rebuilt. Discard (return to Spain) for +2 PW
Abandoned Spanish Military (Luzon) P0, M3, E0, S-1, I0, I0, PW2, ER1, IOC0 (deploys ROL, Holy See) May not be strengthened or rebuilt. Discard (return to Spain) for +3 PW
Missionaries P0, M0, E0, S3, I0, I1, PW1, ER4, PW0, ER0
Missionaries P0, M0, E0, S3, I0, I1, PW1, ER4, PW0, ER0

Modifier Cards:

Papal Bull P+2, S+4, PW0 Only available after the first Church lands is Redistributed.

*****

EAST ASIAN INTERESTS (EAI) [8]

Faction Cards: Start in Patron Corner when deployed, unless otherwise noted.
Embassy{Forbidden City} P2, M0, E2, S2, I0, I1, PW4, ER8, C2 +1 mission; -1PW to commit to any action
East Asian Diplomats P5, M0, E0, S2, I0, I2, PW4, ER4
East Asian [General] Requires successful smuggling operation or 2 PW is lost
East Asian {Nippon} Volunteers P0, M6, E0, S0, I0, I0, PW6, ER3
East Asian {Siberian} Volunteers P0, M4, E0, S0, I0, I0, PW4, ER2
East Asian {Chinese} Volunteers P0, M2, E0, S0, I0, I0, PW2, ER1

Modifier Cards: Requires successful smuggling operation or 2 PW is lost
East Asian Arms +1M (No machine guns included) Playable only on Insurgent or Population Assets
East Asian Arms +1M (No machine guns included) Playable only on Insurgent or Population Assets
East Asian Currencies One PW cost = 2 Insurgent or SuluS PW

*****

EUROPEAN INTERESTS (EI) [9]

Faction Cards: Start in Patron Corner when deployed, unless otherwise noted.
Embassy {Buckingham Palace} P3, M0, E2, S2, I0, I1, PW4, ER8, C2 +1 mission; -1PW to commit to action
European {German} Diplomats P6, M0, E0, S1, I0, I3, PW4, ER4
European {French} Diplomats P5, M0, E0, S2, I0, I3, PW4, ER4

Modifier Cards: Requires successful smuggling operation or 2 PW is lost
Gentlemen Adventurer {British} +3M
Gentlemen Adventurer {German} +3M
European Arms +2M (Machine guns included)
European Arms +2M (Machine guns included)
European {English} Currencies (One PW cost = 3 Insurgent PW)
European {French} Currencies (One PW cost = 3 Insurgent PW)

*****

[END]

Appendix E – Scenario Development Tool Kit, Software Design Document (SDD)

Table of Contents

Introduction

This Software Design Document (SDD) documents the initial design and requirements for the Scenario Development Tool Kit being developed under the Successfully Managing Insurgencies and Terrorism Effectively (SMITE) program.

Project Description

This project will develop a SMITE Scenario Development Tool Kit (SSDTK) for the SMITE paper simulation tool. The toolkit will allow the user to create a complete scenario description, scenario parameters and a scenario deck input sheet. The scenario parameters will include roles, victory conditions, and season and turn cycle definitions. The scenario deck input sheet will define the events, patron asset, population asset, and modification cards for the scenario. The resulting initial design of the SSDTK may also be used in the digitized version of SMITE.

Background

The goal of the SMITE program is to provide individuals with a simulation tool to learn from and experiment with, to prepare them to make decisions with lasting outcomes while not jeopardizing military missions. The SMITE paper Simulation Tool is designed to help operational decision making based on strategic doctrine pushed down and experimented with through role playing. The SMITE Paper Simulation Tool requires a toolkit for the documentation of game parameters and the game cards associated with a scenario.

Assumptions

The user is familiar with the SMITE project objectives. The initial version will be file or database driven. A predefined group of base information will be defined for user selection. The output text files from the scenario description and parameters will be used by the SMITE paper simulation tool players in game play. The text files for the scenario deck will be used by the media group to create the scenario card deck for game play. The population Asset cards will be used to generate the chits for the current paper simulation tool. The actual creation of the scenario card deck is outside the scope of this development. Information Operation (I/O) cards are static and used in all scenarios.

Requirements

The administrator will add users to the system.
The administrator will be able to add or modify the base files.
The user that creates a scenario is the scenario owner.
Only the owner will be able to modify and delete their own created scenario.
The administrator my change the ownership of a scenario.
The user will login to access the scenario development tool kit.
The user will have the ability to create, modify and save a scenario.
The user will have the ability to save a modified scenario with a different scenario name.
Within a scenario the user will have the ability to create, modify and save a scenario description.
The user will have the ability to define scenario roles.
The user will have the ability to define scenario role victory conditions.
The user will have the ability to create, modify and save scenario event card definitions.
The user will have the ability to create modify and save patron asset card definitions.
The user will have the ability to create modify and save population asset card definitions.
The user will have the ability to create, modify and save
The user will have the ability to create, modify and save all scenario cards.
The user may pick from an existing scenario to use as is, modify or create a new scenario.
The user may use existing scenario deck input sheets to develop a new scenario deck.

Predefined Base files – TBD.
Complete scenario elements definition – TDB.

Scenario Elements

A complete scenario definition is a complete package of components to allow the media group to develop a set of cards for the scenario and the scenario description text to allow a player to participate in decision making using the SMITE Paper Simulation Tool. The scenario description and properties include a name, description text including the operational theater and setup definition, seasons and turn cycle definition, roles identifying factions, role political will, victory conditions and a definition of the parameters for gain of loss of political will.

Use Case Diagrams

Boundaries

System.
Scenario files.
Base predefined files.

Actors

Administrator – a person who manages base scenario information and

performs system administration for the SSDTK.

Scenario Developer – a person who creates or modifies scenario information.

Player – a person who gets the scenario definition.

Media Management – a person who receives the file to produce the event deck and asset decks used to produce the cards for the scenario.

Use Cases

Administrator logs into system
Administrator performs System Administration
Administrator performs Scenario Administration

User logs into the system.
User defines a scenario.
　　　　User defines Scenario Description and Properties.
　　　　User Creates a Scenario Description and Properties
　　　　　　User creates a scenario definition.
　　　　　　User creates a scenario role.
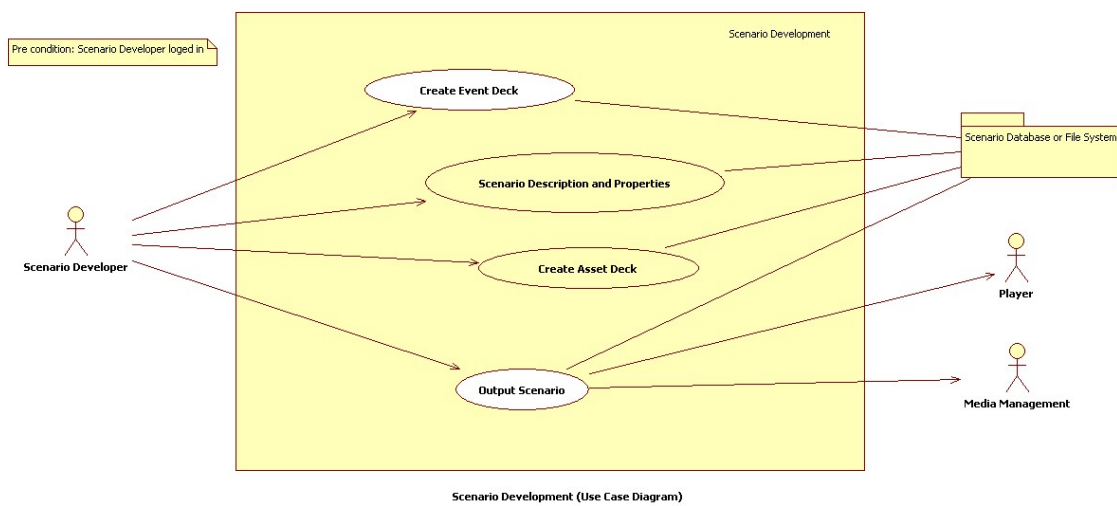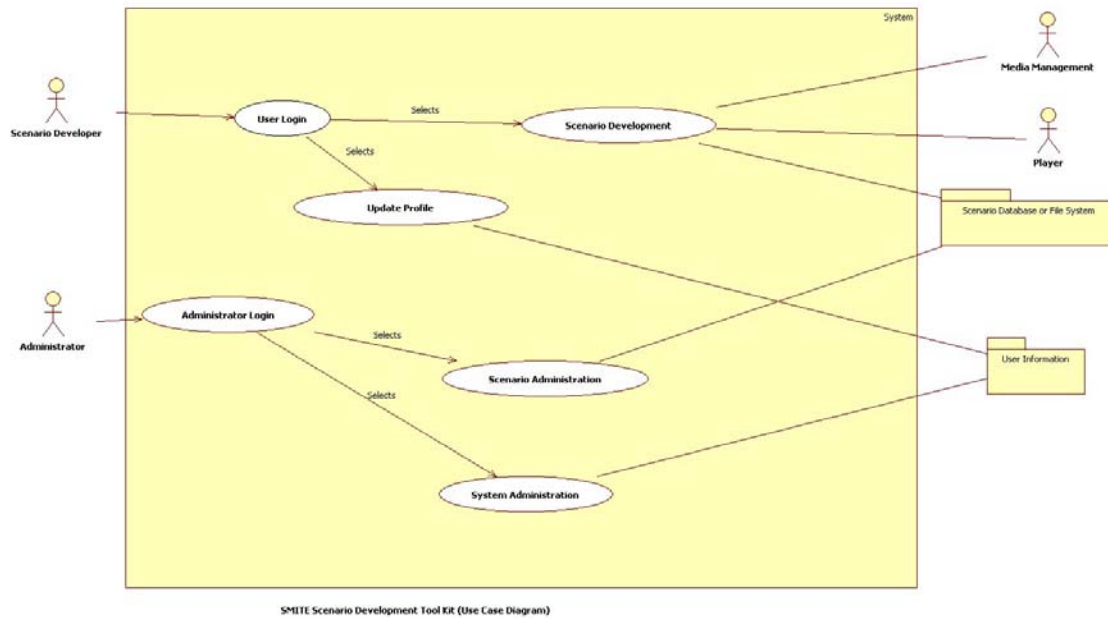　　　　User creates the Event deck.
　　　　User creates an Assets deck.
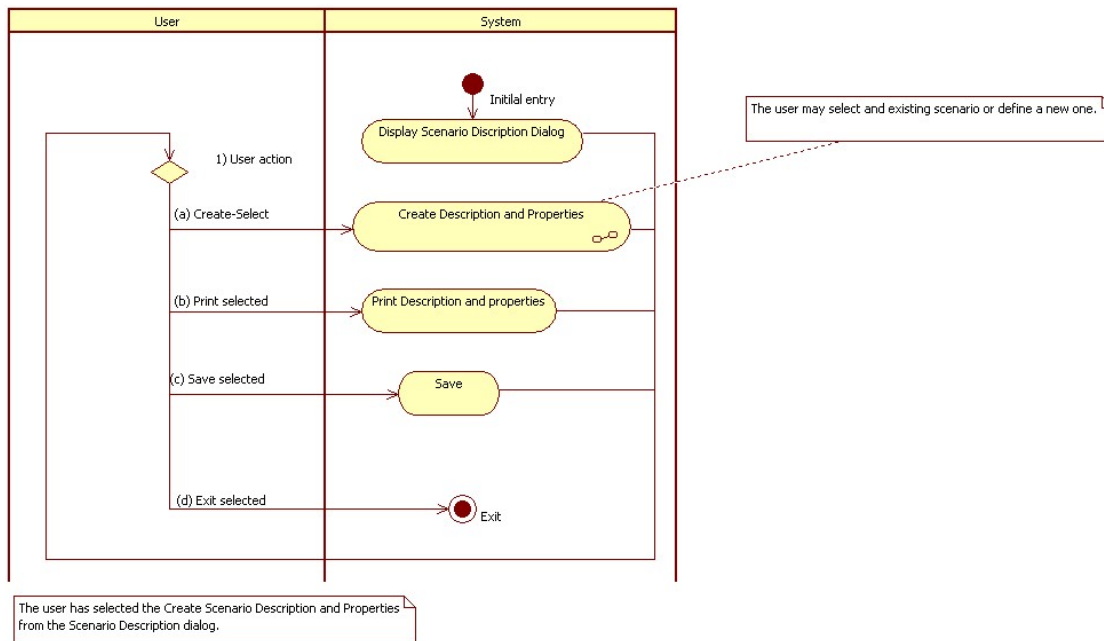User outputs the scenario definition to a file.
User outputs the event deck and asset decks to file.

Use Case Diagrams

High Level Use Cases

SMITE Scenario Development Tool Kit (Use Case Diagram)

Scenario Development (Use Case Diagram)
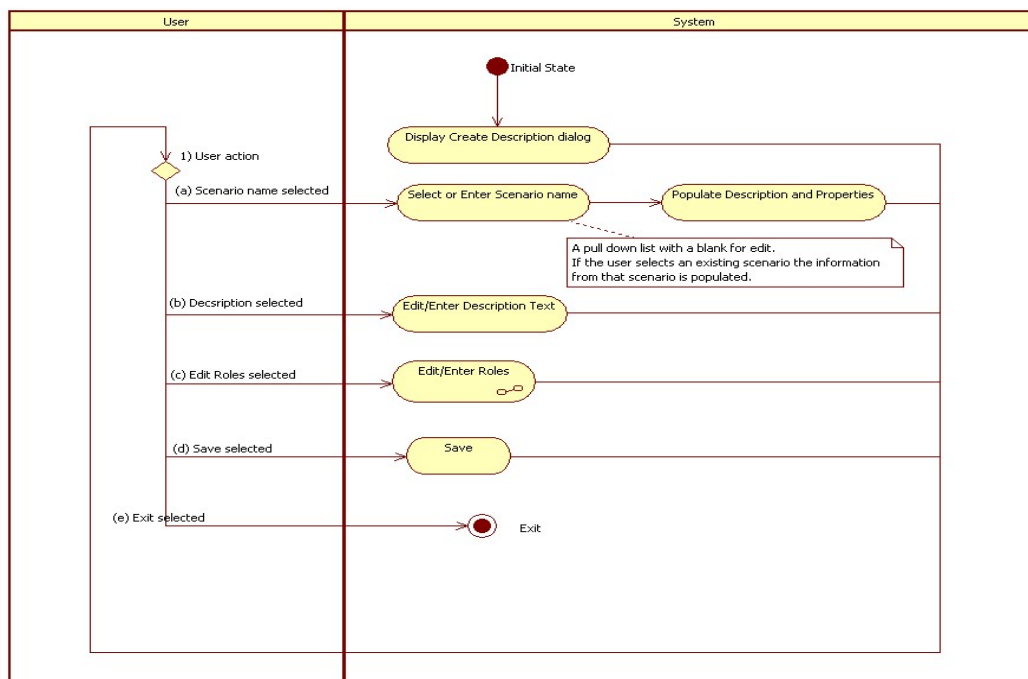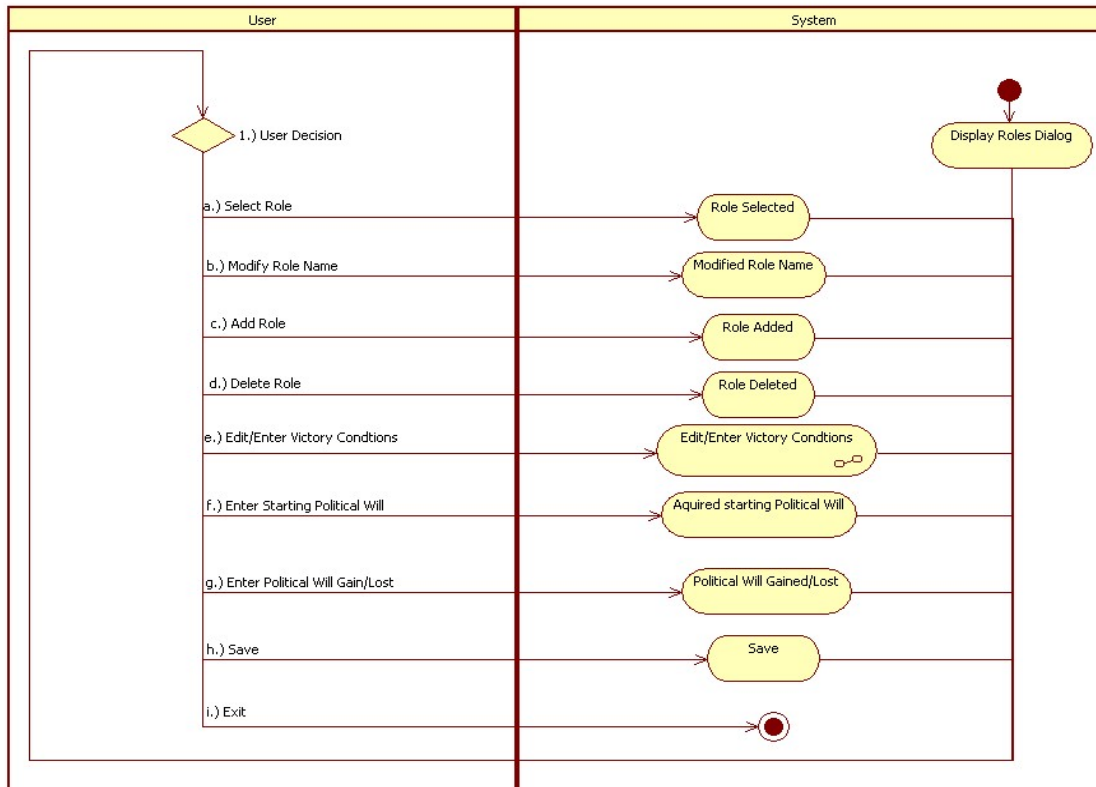
Use Case Activity Diagrams

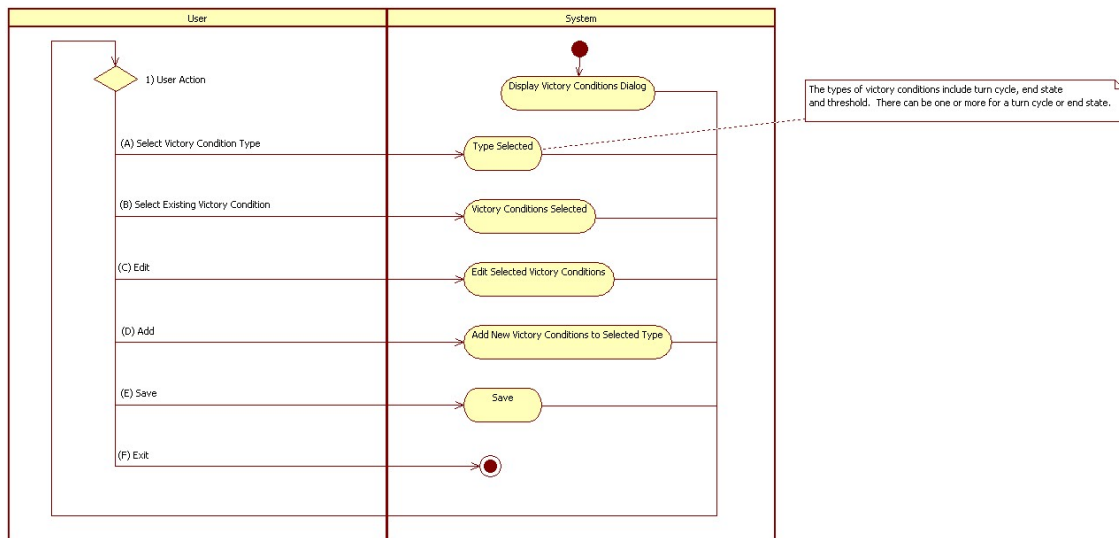**Scenario Description and Properties (Activity Diagram)**

Create Description and Properties (Activity Diagram)

The scenarion description and properties consists of the scenario name, description and the defined roles.
The scenario description is a text sumary of the problem to be adderssed, the theater of operations, seasons and turn cycles.
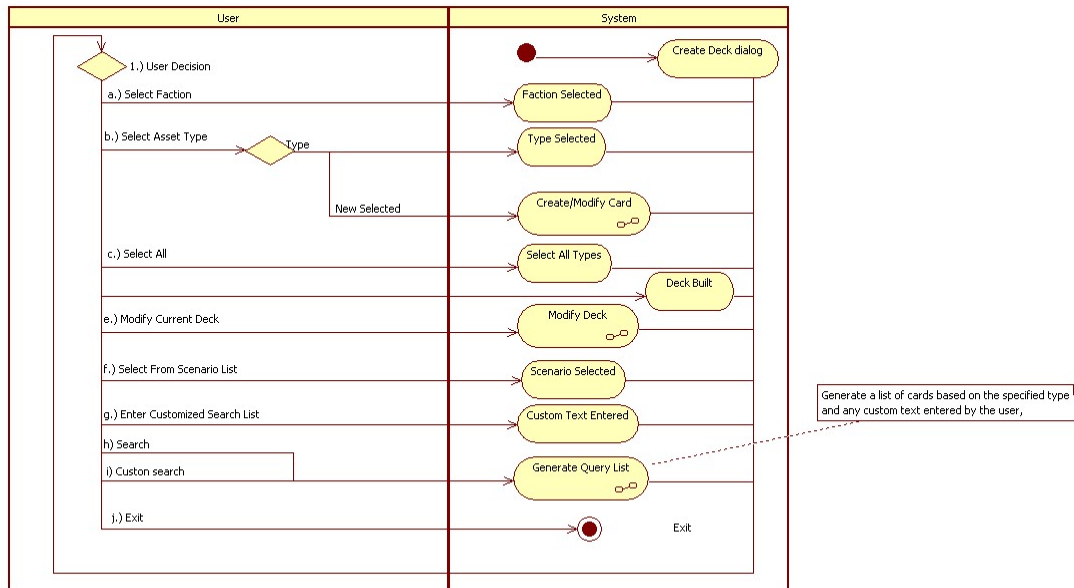
User	System
◇ 1.) User Decision	● Display Roles Dialog
a.) Select Role	Role Selected
b.) Modify Role Name	Modified Role Name
c.) Add Role	Role Added
d.) Delete Role	Role Deleted
e.) Edit/Enter Victory Condtions	Edit/Enter Victory Condtions
f.) Enter Starting Political Will	Aquired starting Political Will
g.) Enter Political Will Gain/Lost	Political Will Gained/Lost
h.) Save	Save
i.) Exit	◉

Edit/Enter Roles (Activity Diagram)

The Roles of the scenario will define the fractions to be used by the players. Each fraction will identify a player. Each role will have a name, victory conditions, starting political will and the definition for gain or loss of political will.

User	System
◇ 1) User Action	● Display Victory Conditions Dialog
(A) Select Victory Condition Type	Type Selected
(B) Select Existing Victory Condition	Victory Conditions Selected
(C) Edit	Edit Selected Victory Conditions
(D) Add	Add New Victory Conditions to Selected Type
(E) Save	Save
(F) Exit	◉

The types of victory conditions include turn cycle, end state and threshold. There can be one or more for a turn cycle or end state.
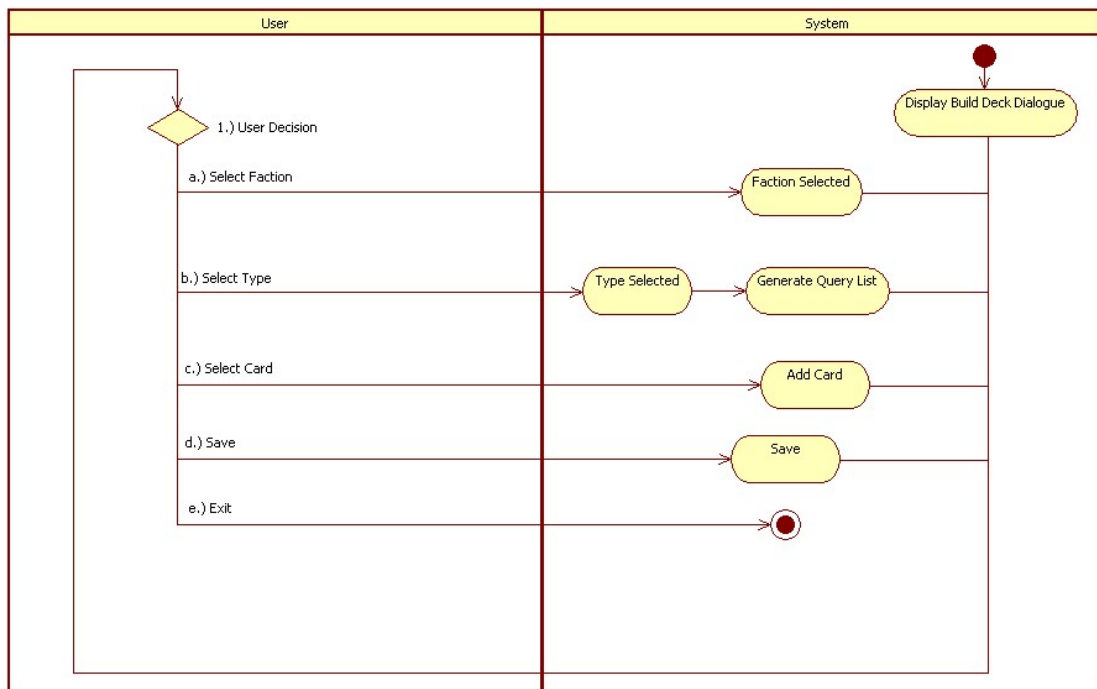
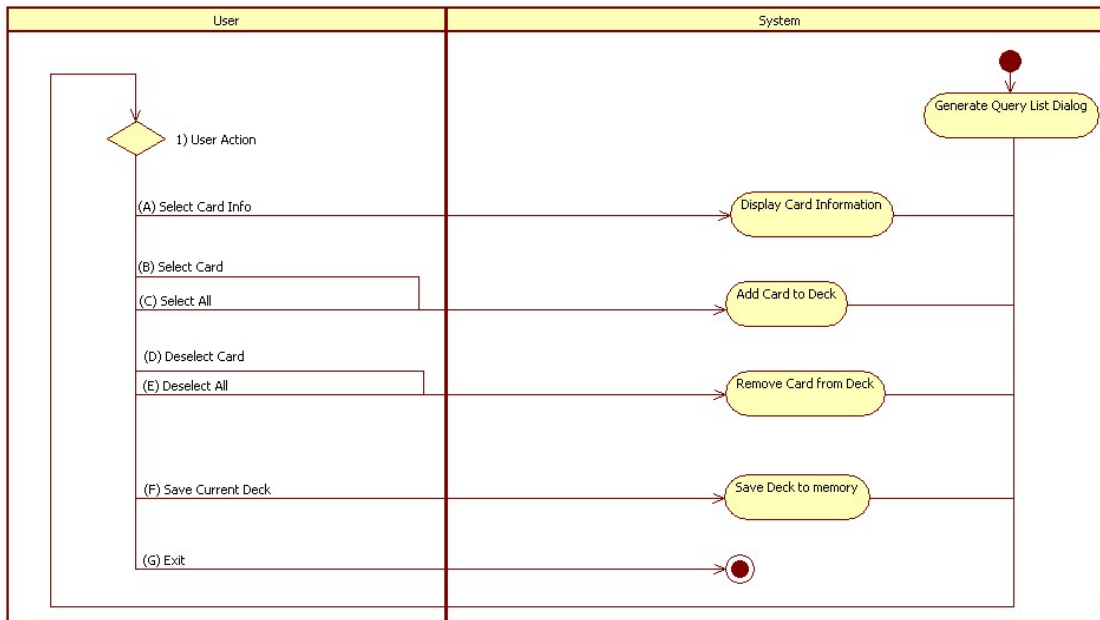**Edit Victory Conditions (Activity Diagram)**
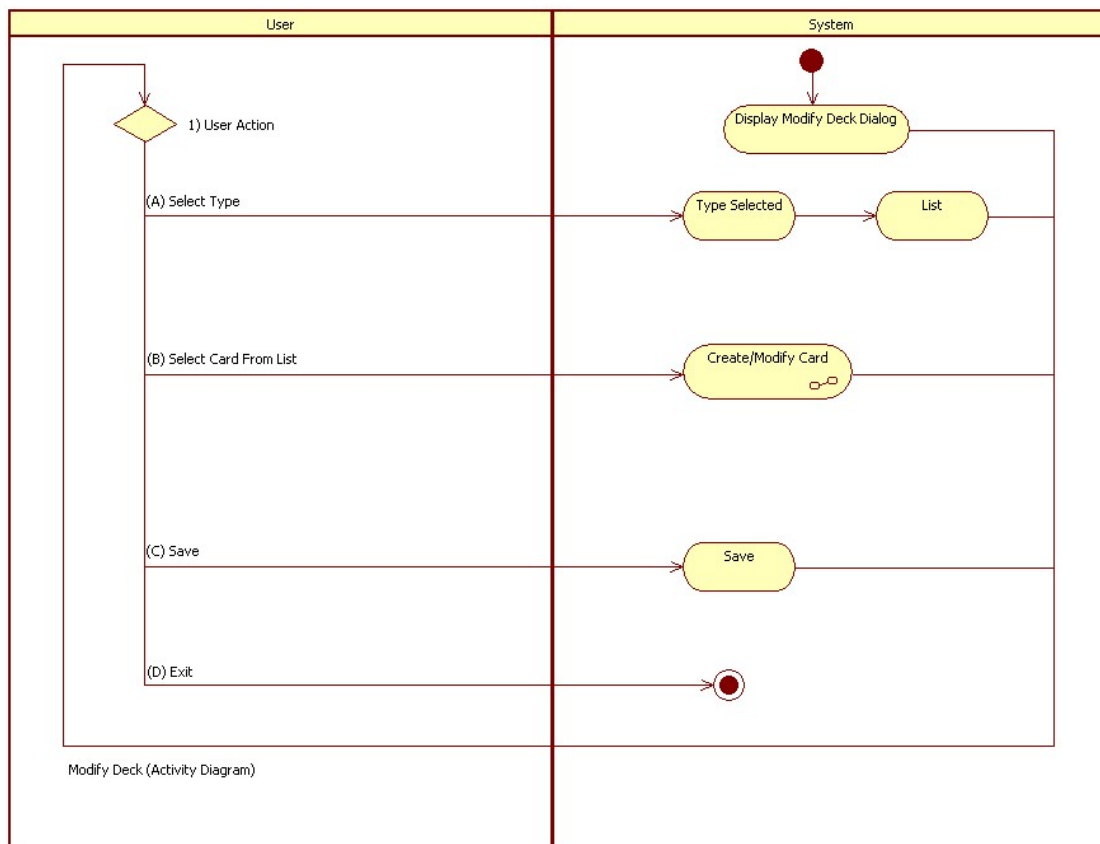
Create Assert Deck (Activity Diagram)

The Create Asset deck is used to create the population and political asset decks and the asset modifier card definitions.
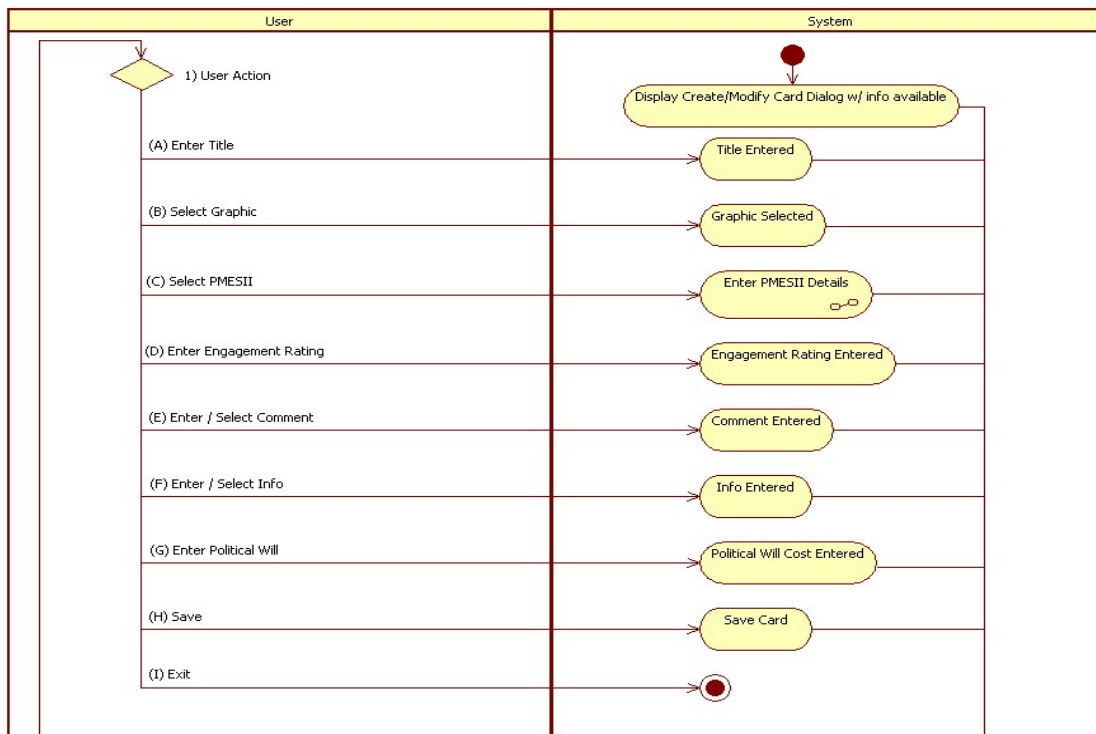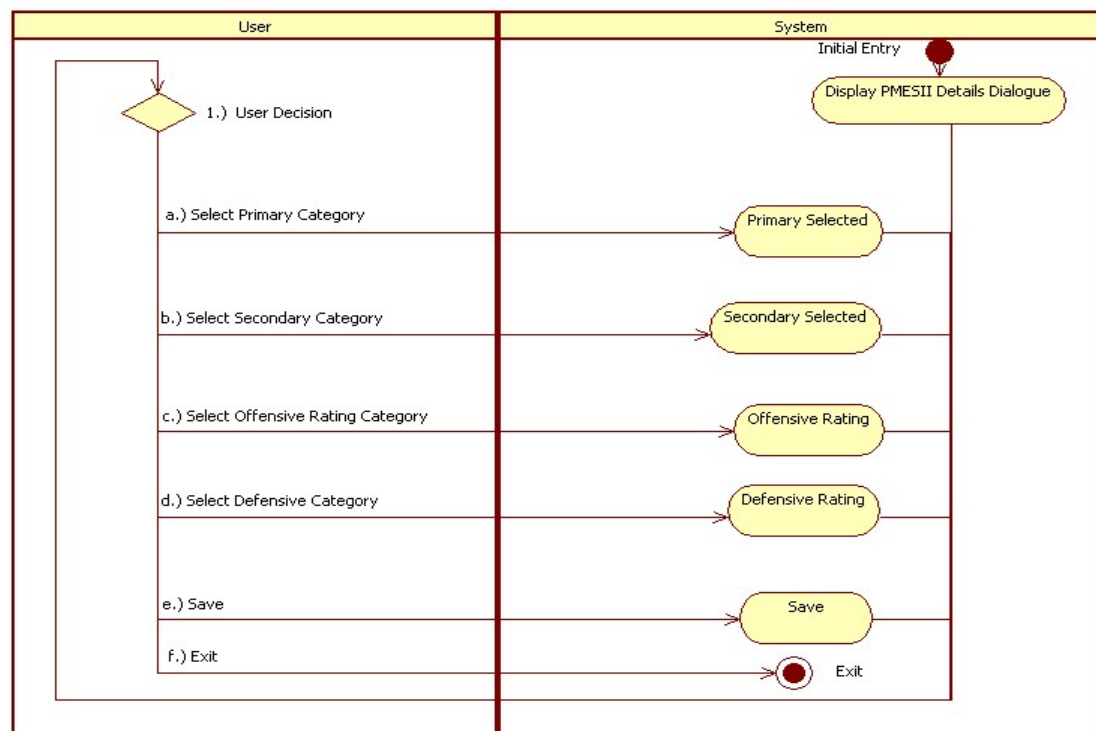

Build Deck (Activity Diagram)

Generate Query List (Activity Diagram)

Modify Deck (Activity Diagram)

Create/Modify Card (Activity Diagram)

User	System
1) User Action	Display Create/Modify Card Dialog w/ info available
(A) Enter Title	Title Entered
(B) Select Graphic	Graphic Selected
(C) Select PMESII	Enter PMESII Details
(D) Enter Engagement Rating	Engagement Rating Entered
(E) Enter / Select Comment	Comment Entered
(F) Enter / Select Info	Info Entered
(G) Enter Political Will	Political Will Cost Entered
(H) Save	Save Card
(I) Exit	

Create/Modify Card (Activity Diagram)

Enter PMESII Details (Activity Diagram)

User	System
	Initial Entry
1.) User Decision	Display PMESII Details Dialogue
a.) Select Primary Category	Primary Selected
b.) Select Secondary Category	Secondary Selected
c.) Select Offensive Rating Category	Offensive Rating
d.) Select Defensive Category	Defensive Rating
e.) Save	Save
f.) Exit	Exit

Enter PMESII Details (Activity Diagram)

Appendix F – Acknowledgements

The SMITE Team would like to thank the following for their time, attention, input, feedback, suggestions and support throughout this project:

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